

January-April 2021

Industria

Volume 4
Issue 1

Quarterly Newsletter

ia.ie.pels.ieeekerala.org



IEEE

IEEE IA/IE/PELS Jt. Chapter Kerala

Editorial Board

Dr. K. Bijuna Kunju

Chair, IEEE IA/IE/PELS Jt. Chapter Kerala

Dr. Vasanthi V

Vice Chair, IEEE IA/IE/PELS Jt. Chapter Kerala

Prof. Prabin James

Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala

Prof. Muhammad Kasim S

Immediate Past Chair, IEEE IA/IE/PELS Jt. Chapter Kerala

Dr. Biju K

Immediate Past Vice Chair, IEEE IA/IE/PELS Jt. Chapter Kerala

Mr. Sooraj V Namboothiri

Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala

Ms. Manna Maria John

Newsletter Editor, IEEE IA/IE/PELS Jt. Chapter Kerala

Ms. Krishna V

Newsletter Editor, IEEE IA/IE/PELS Jt. Chapter Kerala

VOLUNTEER ACCOMPLISHMENTS

 **IEEE IA/IE/PELS**
Jt. Chapter Kerala



Congratulations

IEEE Kerala Section
Outstanding Teacher Award 2020

Dr. Bijuna Kunju

Chair
IEEE IA/IE/PELS Jt. Chapter
Kerala




 IAS / IES / PELS Jt. Chapter Kerala

 **IEEE IA/IE/PELS**
Jt. Chapter Kerala



Congratulations



Prof. Muhammed Kasim S
Chair, IEEE IA/IE/PELS Jt. Chapter Kerala, 2019
Chair, IEEE Educational Activities Kerala 2020

For being selected as
Vice Chair, IEEE Kerala Section
for the year 2021

 **IEEE IA/IE/PELS**
Jt. Chapter Kerala



Congratulations



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

For being selected as
Treasurer, IEEE Kerala Section
for the year 2021

 **IEEE IA/IE/PELS**
Jt. Chapter Kerala



Congratulations

IEEE Kerala Section
Outstanding Student Volunteer
Award 2020

Mr. Ruben Mathew

Student Representative
IEEE IA/IE/PELS Jt. Chapter
Kerala



 IAS / IES / PELS Jt. Chapter Kerala

 **IEEE IA/IE/PELS**
Jt. Chapter Kerala



Congratulations



Mr. George Puthanangadi
Newsletter Editor, IEEE IA/IE/PELS Jt. Chapter Kerala

For being selected as
Outstanding Student Volunteer (Honourable Mention)
of IEEE Kochi Subsection

EXECOM 2021

Professional Execom 2021



IEEE IA/IE/PELS Jt. Chapter Kerala PROFESSIONAL EXECOM 2021

 <p>Dr. K. Bijuna Kunju <i>Chair</i> Professor, TKM College of Engineering, Kollam</p>	 <p>Dr. Vasanthi V. <i>Vice-Chair</i> Professor, NSS College of Engineering, Palakkad</p>	 <p>Prof. Prabin James <i>Secretary</i> Asst. Professor, Vimal Jyothi Engineering College, Kannur</p>	 <p>Prof. Muhammad Kasim S. <i>Immediate Past Chair</i> Professor (Retd.) TKMCE, Kollam</p>
 <p>Dr. Biju K. <i>Immediate Past Vice Chair</i> Asst. Professor, College of Engineering, Munnar</p>	 <p>Dr. Dinesh Gopinath <i>Chair - Educational Activities</i> Associate Professor, College of Engineering, Trivandrum</p>	 <p>Dr. Jalson Mathew <i>Chair - Conference Activities</i> Associate Professor, Govt. Engineering College, Thrissur</p>	 <p>Dr. R. Sudharshan Kaarthik <i>Chair - Research Activities</i> Asst. Professor, IIST, Trivandrum</p>
 <p>Er. C. M. Varghese <i>Chair - Industry Relations</i> Chief Executive Officer, Ever Green Energy Technologies, Kochi</p>	 <p>Dr. Pinkymol K. P. <i>Chair - Chapter Relations</i> Assistant Professor, NIT Trichy</p>	 <p>Er. Pradeepkumar Keloth <i>Chair, Industry-Academia Interactions</i> Head of Electrification, Robert Bosch Engg. Business Solutions, India</p>	 <p>Prof. Divya N. A. <i>WIE Coordinator</i> Asst. Professor, Govt. Engineering College, Thrissur</p>
 <p>Er. Prasanth Pathiyil <i>Chair - Projects and Research</i> Lead, CoE Electrification, Robert Bosch Engg. Business Solutions, India</p>	 <p>Prof. Jithin K. Jose <i>Representative, Kochi hub</i> Asst. Professor, Jyothi Engg College, Cheruthuruthy</p>	 <p>Dr. Deepak M. <i>Representative, Malabar hub</i> Asst. Professor, NIT, Calicut</p>	 <p>Prof. Agi George <i>Chair Membership Development</i> Assistant Professor, AJCE Kanjirappilly</p>

EXECOM 2021

Student Execom 2021

**IEEE IA/IE/PELS**
Jt. Chapter Kerala

IEEE IA/IE/PELS Jt. Chapter Kerala



STUDENT EXECOM 2021

 Sooraj V Namboothiri Student Representative College of Engineering Trivandrum	 Rakesh M R Technical Coordinator NSS College of Engineering Palakkad	 Mohammed Musharraf ECC MEA Engineering College, Perinthalmanna	 Cliffin Cletus Webmaster College of Engineering Karunagappally	 S. Radhika Menon WIE Coordinator ASIET, Kalady
 Anandhu R Nair Student Representative - Travancore Hub College of Engineering Trivandrum	 Govindaraman S Student Representative - Kochi Hub MACE, Kothamangalam	 Haritha M E Student Representative - Malabar Hub Govt. Engineering College Kannur	 Vivek S Web Reporter College of Engineering Chengannur	 Kailas Krishnan R Design Lead UKF College of Engineering, Parippally
 Sharika P Content Writer NSS College of Engineering Palakkad	 Vindhujha B K Content Writer RIT Kottayam	 Manna Maria John Newsletter Editor College of Engineering Chengannur	 Krishna V Newsletter Editor JCET Palakkad	 Thomas K Gimmy LINK Rep RSET Kalkanad

 IAS / IES / PELS Jt. Chapter Kerala



IAS / IES / PELS Jt. Chapter Kerala



Joint Chapter Events

January

Annual General Meeting

The AGM of IEEE IA/IE/PELS Jt. Chapter Kerala was organized on 14th January 2021 in the online mode. The meeting commenced by 6:30 pm. Dr. Tony Sebastian, Immediate Past President of IEEE Industry Applications Society inaugurated the meeting. The Chief Guest for the meeting was Dr. Akshya Kumar Rathore, Chair, IEEE IAS Awards Dept. All the guests commended on the vibrant activities of the chapter



Virtual Poster

The newly elected executive committee of the chapter was introduced to the gathering. The meeting also witnessed the envisioning of some of the upcoming events to be conducted. 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.

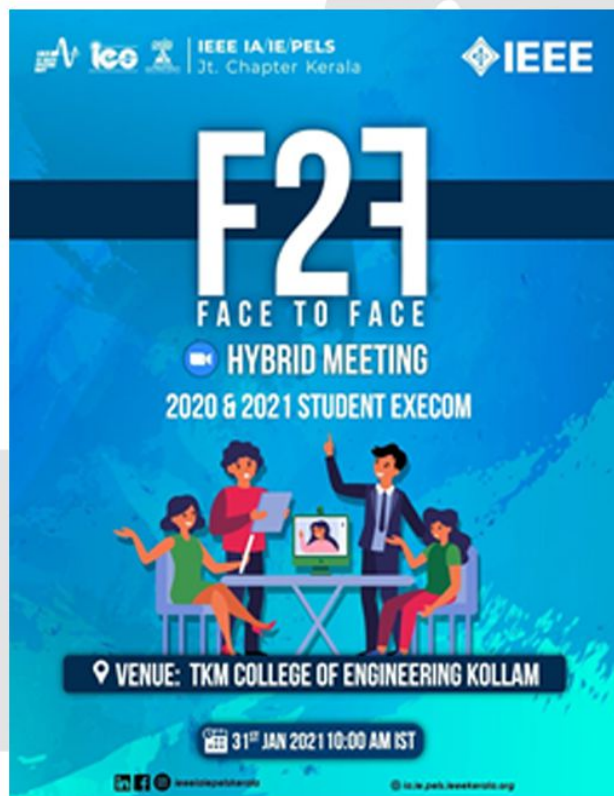
F2F Meeting

IEEE IA/IE/PELS Jt. Chapter Kerala conducted the first Face to Face Meeting of the year on 31st January 2021 in hybrid mode providing a platform for the members of Student Excom of 2020 and 2021 to interact with each other amidst the covid pandemic. The meeting was held at TKM College of Engineering, Kollam, and was live-streamed through Zoom with a total of 28 attendees.

The session commenced at 10:00 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 Dr. Bijuna Kunju (Chair IEEE IA/IE/PELS Jt. Chapter Kerala). Later all the attendees provided a brief self-introduction. The following session was handled by Prof. Biju K (Treasurer IEEE Kerala Section) in which he talked about the role, responsibilities, and duties of each Excom member. He shared encouraging words on being a diligent volunteer maintaining a proper balance with academics.

Prof. Shankar J. (Chair, Student Activities Committee IEEE Kerala Section) addressed the gathering and provided insights into the activity plans of IEEE Kerala Section and how the Joint Chapter could play significant roles in becoming a part of those events. The activities of the chapter during the year 2020 were presented by Mr. Ruben Mathew (Student Representative, 2020 Excom IEEE IA/IE/PELS Jt. Chapter Kerala) and Mr. Eldho Babu (Technical Coordinator, 2020 Excom IEEE IA/IE/PELS Jt. Chapter Kerala).

The activity plan for 2021 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 Excom together provides the picture of a promising year ahead.



Virtual Poster



Screenshot of the Photo session

Afterwards, Prof. Mohammed Kasim (Vice Chair, IEEE Kerala Section) enlightened the students regarding the wide range of opportunities provided by IEEE. He appreciated the 2020 Excom for their tremendous efforts and ushered the new team to be vibrant and to help the chapter to achieve further milestones. The meeting ended by 1:00 PM with vote of thanks by Prof. Prabin James (Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala).

Execom Training

The training for the newly inducted Executive Committee of IEEE IA/IE/PELS Jt. Chapter Kerala was organized on 8th February 2021. Dr. Biju K, Treasurer, IEEE Kerala Section handled the first session describing the duties and responsibilities of the Execom members. The session was framed in order to instill a sense of leadership and teamwork into the new volunteers.

This was followed by IEEE Vtools Overview session by Ruben Mathew, Student Representative IEEE IA/IE/PELS Jt. Chapter Kerala 2020. He illustrated the uses and advantages of Vtools. He also gave a live demonstration on how to report events at Vtools. Eldho Babu, Technical Coordinator IEEE IA/IE/PELS Jt. Chapter Kerala 2020, handled the session on OU Analytics, in which he gave a clear picture of the activities that can be done through OU. The training session ended with the talk on IEEE IAS, IES, PELS awards by Dr. Prabin James, Secretary IEEE IA/IE/PELS Jt. Chapter Kerala. A total of 21 members attended the session.

H4H - Hack 4 Humanity

H4H - Hack 4 Humanity is an IEEE HAC (Humanitarian Activities Committee) funded event organised by the IEEE IA/IE/PELS Jt. Chapter Kerala. The event mainly focuses on the global humanitarian problems for which a solution or set of solutions are necessary for a sustainable development of mankind. This hackathon provided a platform for the students to think about a sustainable future and come up with some creative solutions for the present issues concerning this planet.



Virtual poster of problem statement

Phase 1

The phase 1 of the H4H was an idea pitching event which was conducted individually where in a set of problem statements (which were taken from the Sustainable Development Goals (SDG), an initiative by the United Nations) were given to think out of the box. A website was made specially for this event in order to help the participants to submit their solutions. It was completed by 31st January 2021 with a participation of more than 1 students. After thorough evaluation, 52 students were shortlisted from a huge number of submissions based on their

innovative ideas presented for each problem statement. Phase 1 was completed by 2nd February 2020.



Virtual poster

Phase 2

The phase 2 of the Hack 4 Humanity was a team based idea pitching round. All the selected participants were grouped into 13 teams. Each team selected a leader within the team and all the communications were done through the team leader. The problem statements were given to the teams and each team worked on the given statement and brought out innovative solutions. The problem statement was released on 8th Feb. Each team was provided 100 hours to generate an innovative idea. The participants submitted their abstract and later a presentation contest where they could explain the ideas was organized on 13th February, 2021. Results were declared on 15th February. Out of 13 teams, 5 teams were selected to the final phase of the Hack 4 Humanity which will be conducted in offline mode once the pandemic situation lightens.

Overview of EV Components and Systems

IEEE IA/IE/PELS Jt. Chapter Kerala in association with Robert Bosch Engineering and Business Solutions Private Limited (RBEI) organised a Webinar on "Overview of EV Components and Systems" on 21st of February 2021 from 7:00 - 8:00 PM IST. The webinar was handled by Dr. Pradeep Kumar Keloth, General Manager, Robert Bosch Engineering and Business Solutions, India who is a pioneer in Automotive and Non-Automotive industry for over 3 decades. The webinar started at 7:00 PM on 21st of February 2021, hosted through Zoom Meeting and had a live stream through YouTube

BOSCH IEEE IA/IE/PELS Jt. Chapter Kerala
In association with
Robert Bosch Engineering & Business Solutions Pvt. Ltd

WEBINAR
on
Overview of EV Components & Systems

SPEAKER

Er. Pradeep Kumar Keloth
General Manager,
Robert Bosch Engg.
& Business Solutions
India

21st FEB 2021
7 - 8 PM IST

Register now
bit.ly/JTChapter_BOSCH

Registration closes on 20th February 2021, 10 pm IST

IES Industrial Electronics Society **IES** IES

Virtual poster

The session began with an overview of Vehicles and Batteries used in them, explaining about the Battery pack module(BMS) and charging-to-driving process. Many topics regarding Electric Vehicles were covered which included the importance of Lithium Ion batteries in EV system, its basic working principle, charging systems and the

major components concerning EV system was also discussed. The session ended with a discussion on 'What academia can do' and the future topics in EV domain.

EV & RENEWABLE ENERGY

IEEE IA/IE/PELS Jt. Chapter Kerala organized a webinar themed "The present status and prospect of EV and Renewable Energy" on 28th February 2021. The session commenced from 7 p.m with 47 attendees. The session was handled by the eminent speaker, Dr Abhijit Choudhary, who is a Researcher with the Drive System Control Research Department, CTI-Controls, Research and Development Group, Hitachi, Ltd.

Speaker turned onto the session by recalling the Paris agreement of reducing carbon emission by 40% by the end of 2030. Industries are also coming forward with new emerging technologies to integrate renewable energy resources into the grid and electrify the transportation sector (EVs, Aircraft, Marine propulsion system etc.). The present status of the EV industry and the future growth trend of EV are illustrated in the session. Finally, some of the emerging research areas and technologies that industries are presently focusing on are also pointed out. The session ended up with Q&A and participants actively took part during the session.

Webinar on Electric Vehicles- Plugging into the future



Virtual poster

IEEE IA/IE/PELS Jt. Chapter Kerala in collaboration with Robert Bosch Engineering and Business Solutions Ltd. (RBEI) organized a webinar on Electric Vehicle - Plugging into the Future on 6th March 2021. The speaker for the session was Ms. Latha Chembrakalam, Vice President, Powertrain and Electrification at RBEI.

The session started by 7:00 pm and session focussed on educating the participants regarding the significance of Electric Vehicles and the future scope of the same. The speaker started on with the basic need of transforming our present day transportation systems to the greener and efficient Electric Vehicles. She emphasized that this is the future of transportation and that we need to adapt them faster so as to build a sustainable future.

Webinar on HILS Testing of EV Drive Train

IEEE IA/IE/PELS Jt. Chapter Kerala organized a webinar on HILS Testing of EV Drive Train on 20th March 2021. The session was handled by Ms. Sajitha Andrews, Specialist at Test System Design Engineering Division, TATA Elxsi. The session started by 7:00 pm with over 30 participants. This webinar was quite demanding at the current scenario where Electric Vehicles are considered a potential field in the present as well as the future. The session focussed on the design, implementation, and validation of a hardware-in-the-loop (HIL) test platform for electric vehicle drive applications. The speaker stressed on the fact that in recent years, hardware-in-the-loop (HIL) testing has shown significant promise to serve as a comprehensive rapid prototyping and automated testing platform for advanced power systems. The resource person was successful in keeping the audience lively and interactive throughout the session. It truly served the purpose of giving an in-depth knowledge into the less discussed side of EV design and manufacturing.



Virtual poster

Talk session on “What's Wrong in Being Confident”

“What's Wrong in Being Confident” was a Webinar organized by IEEE IA/IE/PELS Jt Chapter Kerala along with Women in Engineering on 27th March 2021 at 7:00 PM IST. The speaker for the webinar was Ms. Lekha Balachandran. She is the Managing Partner of Resitech Electricals with 28 years of experience in Heavy Engineering. “RESITECH” manufactures 11 KV distribution Transformers and HT Panels, Current/Potential Transformers.



Virtual poster

The webinar was conducted on the idea of learning to succeed from a successful businesswoman, who started a venture on her own and turned it into a prosperous company. Ms. Lekha Balachandran stood true to that notion throughout the webinar by sharing her life experience, starting from a mere B. Tech student to the present position and achieving many milestones on the

way. The speaker pointed out the downside of staying back and the upsides of being a woman in profession. Then she shared her story of bitter and better days. She ended her talk with the wide opportunities for the upcoming entrepreneurs and encouraged everyone to grasp those opportunities. Ms. Latha Balachandran boosted the women community to come forward and take equal responsibilities as men.

Execom Meeting

The first official Execom Meeting of IA/IE/PELS Jt. Chapter Kerala of the year 2021 was organized on 28th March in online mode. The main agenda of the meeting was to create a clear roadmap for the upcoming events to be conducted by the joint chapter. The meeting commenced at 11:15 AM with a participation of 19 members. First came up the discussion regarding the coordination of the Electric Vehicle Hackathon to be conducted in association with Robert Bosch Engineering and Business Solutions Private Limited (RBEI). Several opinions arose regarding the dates of the first online phase and the final phase of the event. IES Expo was next in the line of events to be structured out. Further in the meeting, several plans were devised to publicize the upcoming award submission deadlines. Towards the end, each member presented their activity reports and the meeting was concluded by 12:30 PM. It is evident that the execom meeting paved the way for effectively planning out the events which are to be conducted in the near future.



SBC Events

January **DriveTech Industry** **Training Program - Talk** **on Sensorless Control of** **BLDC Drive**

The third lecture of DriveTech Industrial Training Program on Sensorless Control of BLDC Drive was conducted by IEEE IAS SBC RIT on 6th January 2021 from 6 PM - 8 PM. Dr Biju K, Head of Department of Electrical and Electronics Engineering, College of Engineering, Munnar handled the lecture. The session was informative and benefited the participants as it explained all important aspects of the topic. The event created interest in participants and made them curious to know more about Sensorless Control of BLDC Drive. The session was bloated with knowledge and virtual industrial experience.



Virtual poster

VIRTUAL-IV

The Industry Applications Society of IEEE MACE SB conducted an event named Virtual IV. The main intent of the program was to give the students exposure to the real working environment and show how things are done in an industry. The event was held on the 18th of Jan 2021 2021 from 4:00 PM to

5:15 PM. The event was headed by Sujeeth B, the vice-chair of IEEE Industry Application Society, Merin Mary Josy and Varghese Babu.

A total of 60 students toured the industry virtually out of which 42 were IEEE Members and 18 were Non IEEE Members. On 18th January 2021, for the first time in Kerala, Mar Athanasius College of Engineering made history in projecting the manufacturing process of an upcoming startup venture of repute and rapport under the Kerala Startup Mission (KSUM) live. Sinergia Media Labs(simelabs) the firm engaged in the challenge of economically manufacturing ventilators which are much in need during this emergent situation, offered exemplary co-operation in explaining and exhibiting the functions of manufacturing with all its sophistication. The high profile camera managed by Mr Sujeeth of the college broadcasted the process of manufacturing functions live to the young eagerly watching aspirants with all its originalities intact, virtually gripped them to their seats raved in the flow of knowledge, to their amazement and pleasure, as if they were witnessing the functions right before their eyes.



Virtual poster

IAS ExCom Training

First IAS SBC RIT ExCom meeting was held on 27 January at 4:30 PM.. The purpose of the meeting was to train the new IEEE IAS SBC RIT office bearers. Nithin V M explained CMD report and vTools reporting. CMD and vTools and IAS SBC RIT website were familiarized. vTools event reporting, officer reporting, WebEx request form and E-notice were detailed. IEEE talent show, Student thesis contest, Student design contest, IAS website contest were mentioned. Duties and responsibilities of officer positions were discussed. Discussed GMC and planned to invite renowned mentors.

Session on Membership Development and Project Awareness

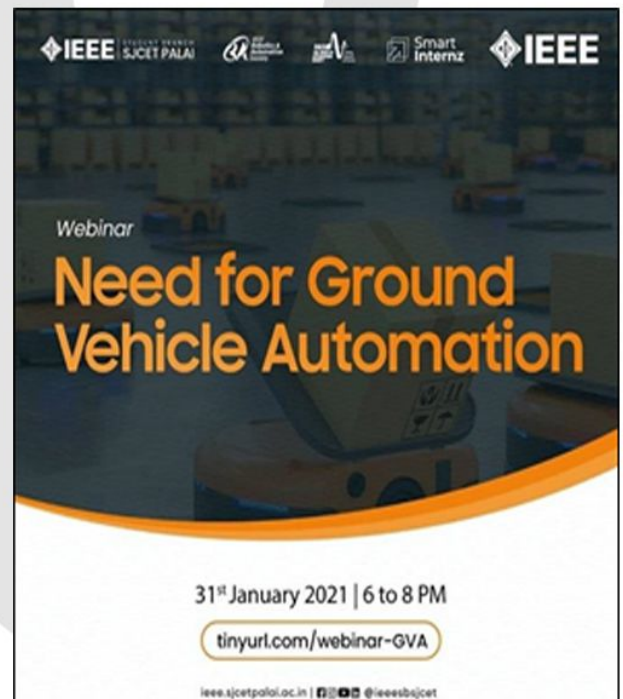
IEEE IAS SBC VJEC conducted a session on "Membership Development and Project Awareness" for first year students. It was conducted on 31st January between 7PM and 8PM on Google Meet. The session was handled by IEEE IAS SBC VJEC Chair, Mr. Sharan Ratnakumar. Students were given a basic idea about IEEE, IAS IEEE, various opportunities that IEEE provide and also discussed about the project contest and various upcoming events.



Screenshot of the program

Webinar on Need for Ground Vehicle Automation

IEEE IAS SBC SJCTET conducted a webinar on the topic Need for Ground Vehicle Automation on January 31st, 2021. The session was taken by Smart Internz. The session was conducted from 6:00 pm-8:00 pm on zoom Meetings. About 20 members participated in the session. Out of which 18 members were IEEE members and the rest were non-IEEE members. The session started with an introduction to ground automated vehicles. The session was very useful for the attendees to learn more about the features and need for ground vehicle automation. Automation has always been a technology that allowed us to think beyond our physical boundaries or limits. The session ended up clearing the doubts of the attendees. Thus, the session was useful for the attendees and had a great outcome.



Virtual poster

February

BUILD-IT



Virtual poster

RSET IEEE IAS SBC has been keen and determined in providing a platform as well as be a strong force in nurturing and growing the skills of all members right from the first year and develop them to become excellent professionals. BUILD-IT is one such exclusive event for the first years, to give them an insight into various fields and skills. A 4 day event from 3rd February 2021 to 6th February 2021, 6-7 PM and was conducted through Cisco WebEx and had a total of 183 participants.

DAY 1: Inauguration by Dr. Bijuna Kunju (Chair IEEE IA/IE/PELS Jt. Chapter Kerala)
DAY 1: Ideation to Pitching by Mr. Daniel Jeevan

DAY 2: Introduction to electronics and microcontrollers by Mr. Hisham Sherief and Ms. Nivetha K M

DAY 3: Introduction to Tinkercad by Mr. Nitheesh Kurian

DAY 4: Introduction to FUSION 360 by Mr. Salman Faris

Each session was more informative and encouraging to the participants and towards the end all participants were divided into groups of 3 and were all a part of the ideation competition where they were provided with various industries to choose from and innovate new products or developments through the skills they were able to inculcate through the past 4 days. The top 10 were announced during the closing ceremony. We hope and wish that they continue down this path and continue to be skilled problem solvers and be an inspiration to others

Idea Pitching Contest

An idea pitching contest was conducted on 5 February 2021 in Google Form for the students of VJEC. The event provided project guidance and support for top 10 ideas which included mentoring and hardware.



Virtual poster

Virtual Internship Program

IEEE IAS SBC SJCTET in association with PACELAB had conducted a power packed Virtual Internship Program from February 9th to 14th 2021. The session was open to both IEEE and NON-IEEE members. The session was conducted to develop from

Google Flutter: App development, Python Programming, Internet of Things (IoT), Ethical Hacking, AutoCAD, AR and Game development and Matlab (General)

26 students participated out of which 7 were IEEEians and 19 non IEEEians. The internship provided the students with an opportunity to upskill, learn and get hands-on experience.



Virtual poster

GENESIS - Task 3

IEEE IAS SCT Student Branch Chapter in collaboration with IEEE SCT SB conducted a mentoring session called GENESIS to the IEEE members of our SB on 9th February 2021. The task we allotted was "Refer and Win" ie, IEEE IAS SCT SB have conducted a talk session as part of FOCUS FORWARD talk series on 13th February 2021. The topic of the session was "Being an Active and Productive Learner" by Mr. VINOD NARAYAN. So the task allotted was the students have to refer atleast two people to the webinar. Students were given Referral codes and the people who register the webinar should use those referrals

SpiceSIM LTspice Hands On Workshop

The one day Hands-on workshop on LTspice has been organized by IEEE IAS/PELS Student Branch, College of Engineering Trivandrum on 11th February 2021, to familiarize the students with software circuit simulation. Out of 77 registrations, about 45 students participated in the workshop. The workshop was handled by the students of College of Engineering Trivandrum.

The event started with the introductory speech by Mr. Harisankar Arun, 3rd year EEE student and Chairperson, IAS/PELS IEEE SB CET. He briefed the outline of the event. The first session was handled by Mr. Ramgopal J., 3rd year EC student and Member, IEEE, who spoke on the basics of LTspice.

A practical training was given on how to simulate simple circuits such as voltage divider circuit, etc using DC operating point. In the next session Mr. Adithyan P. R., 3rd year EC student, elaborated on more complex circuits such as Common Emitter Amplifier using Transient Analysis. Mr. Rohan Damodar S., 2nd year EEE student and Vice Chairperson, IAS/PELS IEEE SB CET, in the final session, spoke on the simulation of additional circuits using AC Analysis, DC Sweep and addition of third party components that are not included in LTspice component library by default.

The entire session was very interactive and the speakers answered the queries raised by the participants. A short feedback session was arranged at the end of the session.



Virtual poster

EXPLORE IAS

IEEE Industry Applications Society Student Branch Chapter, College of Engineering Chengannur was gratified to conduct an online session on EXPLORE IAS on 13th February 2021. Our primary objective was to make an awareness among the students about what the Industry Applications Society has to offer and how it can aid to their professional interests.

Ms. Manna Maria John, Chairperson IEEE IAS SBC CEC started the session by giving an idea about IAS, Chapters & Membership Development (CMD) and then she explained about the various benefits of IAS. Then the session was handed over to Vishnu M, Vice-Chairperson IEEE IAS SBC CEC he explained about the various activities happening in our IAS SBC CEC and also about the future activities of IAS SBC

CEC in this academic year. Finally, Nebic Johnson, Student Representative, IEEE IA/IE PELS Jt. Chapter Kerala (2019) and Past Chairperson IEEE IAS SBC CEC took a session speaking about his experiences as an IEEE IAS member. His session was truly informative, he talked about how to develop our volunteering skills and even spoke of how to volunteer a program. The session was really informative and it sparked the curiosity of the participants which was evident from their responses and feedback.



Virtual poster

IEEE Industry Applications Society Member benefits

The IEEE Industry Applications Society Student Branch Chapter Jawaharlal College of Engineering and Technology organized an online session on IEEE IAS Membership benefits for the students of the institution on 13th February 2021. The session conducted on WebEx meetings started at 6:30pm with a welcome note by Mr. Madhu Krishnan A P (Chair, IEEE IAS

IAS SBC JCET) and Ms. Krishna V (Vice Chair, IEEE IAS SBC JCET) kicked off the presentation with a brief on the technical focus of the session and continued to explain about the different benefits an IEEE IAS Student member gets and the publications namely IEEE Industry Applications Magazine, Electrification Magazine, Open Journal of Industry Applications, Transactions on Transportation Electrification and Transactions on Smart Grid, IEEE IAS Resource Centre, Myron Zucker Programs including Myron Zucker Undergraduate Student Design Contest and Myron Zucker Undergraduate Student Travel Award.

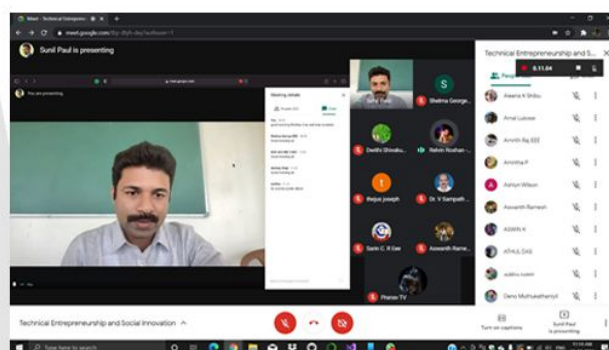
Mr. Madhu then took over the session and presented the activities of the IEEE IAS Student Chapter of JCET in 2020 which featured Inauguration ceremony, Virtual Distinguished Lecturer Program, different technical webinars, non-technical activities, and other activities including IEEE IAS CMD Lecture Series. After that the students had an interaction with the presenters and had a fruitful chat and discussed their various doubts and queries.

The Session helped the chapter increase the membership count by 2, and provide students with an overview of activities and opportunities for students in IEEE Industry Applications Society.

Technical Entrepreneurship and Social Innovation – Phase 1- Introduction

IEEE IAS SBC VJEC conducted a session on "Technical Entrepreneurship and Social

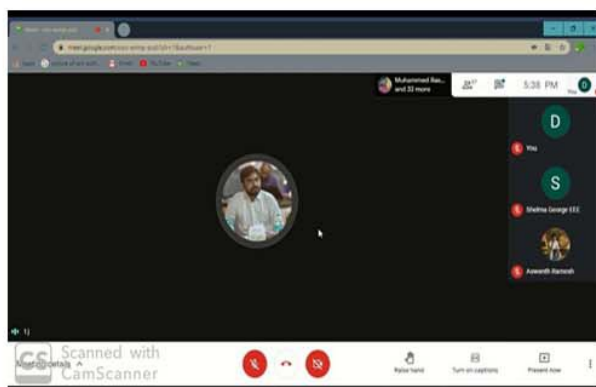
Innovation - Phase 1 introduction" for students. It was conducted on 13th February 2021 on Google Meet. The session was handled by Mr.Sunil Paul. Students were given a basic idea about robotics and various opportunities that robotics field provide and also discussed about the project contest. This was the introductory session for the 4 month workshop on robotics to be conducted in the month of May.



Screenshot of the session

Technical Entrepreneurship and Social Innovation - Phase 2- Introduction

IEEE IAS SBC VJEC conducted a session on "Technical Entrepreneurship and Social Innovation - Phase 2 introduction" for students. It was conducted on 14th February 2021 on Google Meet. The session was handled by Mr.Thejus Joseph and Mr.Jerin Peter. Students were given a basic idea about robotics and various opportunities that raspberry pi field provide and also discussed the project contest with an interactive session. This was the introductory session for the 4 month workshop on Raspberry pi and Entrepreneurship to be conducted in the month of May.



Screenshot of the session

Technical Entrepreneurship and Social Innovation - Phase 3-Introduction

IEEE IAS SBC VJEC conducted a session on "Technical Entrepreneurship and Social Innovation - Phase 3 introduction" for students. It was conducted on 15th February 2021 on Google Meet. The session was handled by Mr. Sarin C R. Students were given a basic idea about App development and IOT. This was the introductory session for the 4 month workshop on IOT and App Development to be conducted in the month of May.



Technical Entrepreneurship & Social innovation

Workshop Series on:

- AI
- Robotics
- IoT
- Raspberry Pi
- App Development
- Entrepreneurship Workshops

Introductory session : Phase 3
IoT & App Development
15.2.2021 | 5:30PM-6:30 PM



Virtual poster

Abilita-A Mentorship Program

"Abilita" a mentorship program was hosted by Industry Applications Society Chapter of IEEE Student Branch, ASIET on 14th of February, 2021 from 11.00 am to 12.00 pm and 7.00 pm to 8.00 pm through an online platform. Around 112 participants attended the webinar which includes 95 IEEE members and 17 Non IEEE members from in and around the Kerala Session. The session contained two topics, "The way of resume building" and "How to create a LinkedIn profile". The former was handled by Ms. Deepa Jose, Assistant professor in BSH department ASIET while the latter was handled by Dr. Ragesh G.K, Head of ECE Department ASIET. The speaker gave several insights to common mistakes done while building a resume and necessary steps to be followed to avoid these mistakes. The participants were given various examples on different types of resumes. The vote of thanks by Ms. Khadeeja Beevi MA, Chairperson IEEE IAS SBC ASIET. The evening session was set into motion with a brief interaction with the attendees about their knowledge on social media. The speaker was able to provide a clear cut idea about LinkedIn and its networking capabilities. The session also paved out to be an interactive one where the students raised various questions regarding the topic. The attendees acquired knowledge about the working and potential of LinkedIn as a networking platform. By the end of the session the attendees acquired knowledge about the importance of Resume and LinkedIn

QFiesta Quiz Series

IEEE SB CEA in association with Industrial Applications Society & Industrial Electronics Society had conducted a Quiz series exclusively for first year students on 17th february 2021. "QFiesta" is an online quiz series conducted on Sustainability & Automation under the topic Sustainable Energy. Quiz competitions are always interesting and informative, which provides the excitement among the participants and also makes them aware. QFiesta was mainly 20 questions based on the topic Sustainability & Automation. It was conducted on the platform "My Quiz". The respective questions for the quiz were prepared by the responsible team. Rules and Regulations of the quiz were informed earlier. The participants joined the competition through the link that was provided. The competition started sharply at 7:00pm with 16 participants. The participants were given about 15 seconds to answer a question.



Virtual poster

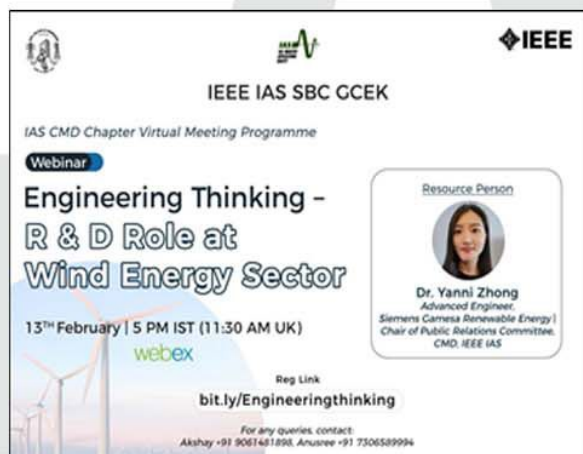
Explore IAS

Explore IAS was organized on 17th February 2021 by IEEE IAS SBC CUSAT. Harigovind M, Associate System Engineer Trainee TCS. IEEE IAS YP VOLUNTEER was the speaker of the session. The session started by 7:00 pm. The aim of the event was to share the information on the benefits of IEEE IAS membership to the IEEE members of our SB. 31 student IEEE members attended this online event. The event began with a briefing about IEEE- its origin, logo, regions and different societies. Further discussion on the membership taking process happened. Followed by talk on membership benefits which included volunteering opportunities, availability of free magazines on relevant topics etc. Gave a brief idea on sister societies of IAS which are -IES, PELS.

WEBINAR-Engineering thinking- R&D at Wind Energy Sector

IAS ,IEEE SB GCEK made the step to its first event which was a Webinar on the topic 'Engineering thinking- R & D Role at Wind Energy Sector'. The session was handled by Dr. Yanni Zhong ,Advanced Engineer, Siemens Gamesa Renewable Energy who is also the Chair of Public Relations Committee, CMD, IEEE IAS. 65 participants registered for the event. The event was held on 13 th febraury 2020 at 5 pm via google meet. 42 participants joined the session. The session went really interesting where the speaker touched up on stories along with the speaker's career path and how well the speaker could apply engineering thinking in studies and job. The event was opened to all iee members. The event turned out to be extra special as we had Peter Magyar sir, IAS

CMD Director also in the session. As per the information received from him this was the first virtual event at IAS. We also had 5 attendees from Germany. The session was really informative where the speaker covered all dominant points. All the attendees were contented with the session which was worth the time. Queries raised from the attendees after the session was cleared by the speaker. The event made its end with a virtual memento presented to the speaker as a token of love from our IEEE SB GCEK family.s.



Virtual poster

FocusForward- #Talk1 on "Being An Active And Productive Learner"

IEEE IAS SCT SB conducted a webinar as part of the FOCUS FORWARD talk series on 13th February 2021 from 10 am to 11 am IST. The speaker of the event was Mr. Vinod Narayan founder of penpositive.com, He is an educator a Minima-Agilit and a V(B)logger, aimed at creating a community of Active and Productive Learners. "FOCUS FORWARD #talk1" was a one-hour session, the first fifteen minutes was a talk session and the rest

was an interactive talk session in which the participants asked Mr Vinod Narayan about various tricks and methods that can be followed to become an active and productive learner. Mr Vinod Narayan explained each and every question very beautifully and included various experiences from his personal life.

We had an active participation more than 90 participants. The event was very successful, we received positive feedback from the participants and from our resource person

IAS Membership Development Session

IEEE IAS SBC CETkr conducted an interactive session on "Membership Development" exclusively for the students of CETkr on 14th February 2021 at 4 PM. The session was handled by Ms. Nivetha K M (MD Coordinator and Kochi HSR Student Execom 2020, IEEE IA /IE/PELS Jt. Chapter, Kerala).

The training outlined principles on what is IAS, advantages of having an IAS membership and many other topics like, Joint Publications of IEEE IAS, Activities of IEEE IA/ IE/ PELS Jt. Chapter Kerala, IEEE IAS CMD Chapter Web Contest, IAS CMD Award Winners & Travel grant recipients from Kerala Section

The session was carried on with great fervour. It was made more captivating by conducting a Kahoot by ensuring participation from almost all attendees. The winners of the Kahoot were also announced. There was also a Q&A segment in the session.

Vote of thanks delivered by Reshmi P R, IAS Vice Chair, IEEE SB CETkr pronounced the cessation. The session was really worthwhile and was powerful enough to convince the attendees.

'Q'RIOUS

Power Electronics Society of IEEE SBC GCEK conducted an exciting quiz competition in the name 'Q'RIOUS was conducted on 17th February 2021 from 7 pm to 7:25 pm through Google form. The event was coordinated by Avani P V and Jijina C. The competition was conducted exclusively for first-year IEEE members of the Government College Of Engineering Kannur as a part of the introduction of the freshers to PELS society. A total of 25 questions were given to the participants and all the questions were based on basic electrical and electronics. The time provided to them was 25 minutes, which is one minute for each question. A total of 68 students from the first year registered for the quiz, and 42 among them submitted the answer. The winners were selected based on the total number of correct answers and the time of submission and the first one to submit the maximum number of correct answers bagged the prize. Ramnath Shenoy B of S1 CSE bagged the first prize and Jeffrey Shijo of S1 CSE bagged the second prize. The event was appreciated and all the participants responded that the questions were basic, informative as well as challenging.

10 Tips for a Successful Virtual Interview

IEEE IAS SBC RIT organized CAMP'21- 1 on 19th February 2021. The first talk was on 10 Tips for a Successful Virtual Interview by Mr Aravindhan Anbazhagan, Founder of EduRise Global, a virtual education start up

and the recipient of IEEE MGA Young Professionals Achievement Award 2019. He is a passionate IEEE volunteer with numerous accolades, a TEDx speaker and an active person in the field of skill-building. The talk was from 6 PM to 7:30PM. The session was very useful to the students since the current scenario necessitates such an event. The event prepared the participants to be competent and confident for an online interview. The speaker and the participants interacted throughout the event by sharing their views and opinions.



Virtual poster

CAMP'21 - a Career Mentoring Program where your dreams take flight

IEEE IAS SBC RIT organized CAMP'21- 1 on 19th February 2021 from 6:00 PM to 8:30 PM. The second talk was on Research and Higher Studies Abroad by Mr. Vipindev Adat, Researcher at the University of Patras, Greece, Doctoral student at the University of Vigo, Spain. He is a proud alumnus of RIT and the past treasurer of IEEE SB RIT, whose passionate academic pursuits won him exceptional achievements including the prestigious MSCA Fellowship and authorship of numerous

technical papers. The talk was from 7:30 PM to 8:30 PM. The event centred on giving guidance to the participants on research and higher studies abroad was a success with active participation and collaboration. This sermon encouraged the participants to fly away with the wings of their dreams. He outlined the gains of studying abroad. He mentioned different scholarships and financial assistance to study in distant lands. He conversed about a few criteria for studying abroad. He was vocal about the vast opportunities facing students. His experiences inspired students to study abroad.

Introduction To Electric Vehicles, Their Major Components, Technologies Challenges And Future Direction Of Development

IEEE IAS SBC GEC Kozhikode organized a webinar on "Introduction to electric vehicles, their major components, technologies, challenges and future direction of development". The session was handled by Dr Rajesh M Pindoriya, PhD in Power electronics and Electrical devices, Project Engineer at IIT Mandi on 19 Feb 2021 at 6.00 pm via Google Meet. There were a total of 174 registrants, among which 66 were IEEE members and 108 were non IEEE members. The speaker talked about the current status and future of electric vehicles, its advantages and challenges that we have to overcome. After the session, there was a question and answer session which lasted for about 45 minutes. It too was interesting due to

vibrant participants. After all, the session had a good response from the speaker and the participants. The event was coordinated by Vishnu Muraleedharan and Mariyam Mohammed Ali.

FocusForward- #Talk2 on "The Art of Being a Professional"

IEEE IAS SCT SB conducted a webinar as part of the FOCUS FORWARD talk series on 19th February. The event was handled by Ms. Deepa A K, Associate Professor, Department of ECE, Sree Chitra Thirunal College of Engineering Papanamcode and also Vice-Chair, WiE Affinity Group, IEEE Kerala Section. It was a one-hour session. It was an interactive session where the participants asked the professor about various professional ethics that one should follow in their life. She explained each and every question very beautifully and included various experiences from her personal life. The event was very successful, we received positive feedback from the participants.

FocusForward- #Talk3 on "From Campus To Corporate"

IEEE IAS SCT SB conducted a webinar as part of the FOCUS FORWARD talk series on 19th February 2021 at 7 pm IST. The event was handled by Ms Divya C Thampi, Program Manager at SAP Labs India Pvt. Ltd. "FOCUS FORWARD #talk3" was a one-hour session, the event was handled in a very different method. Instead of one-to-many sessions, this was very interactive, the participants were asked to take a survey on what they want when they enter corporate life. And based on the survey she explained various things that are different in the corporate world. There was a Q&A session where students shared their doubts regarding corporate life. The event was successful

and we received loads of positive feedback for the same.

Blog Writing Competition

A blog writing competition based on the topic 'new technology' was conducted on 20th February 2021 in Google Form only for the students of VJEC. The event provided free IAS membership for top 3 winners and also the top 13 articles were published on our website.



Virtual poster

IAS Orientation

The IEEE chapter of our college organized an orientation class for IAS, held on 17th February 2021. The event mainly focused on providing awareness about IEEE and its activities. There was a participation of 100 IEEE members. It was conducted via Google meet. The program started with an introduction speech by Rima Ramesh (IAS SBC Chairperson) followed by the welcome speech of Aswathi M (SB Chairperson). Our beloved Vinita ma'am (SB Counselor) spoke a few words and then Bijuna Ma'am lit the event by discussing the core values in IEEE volunteering and the role of students as an engineer for the society. She also discussed the benefit that will reach the students as an

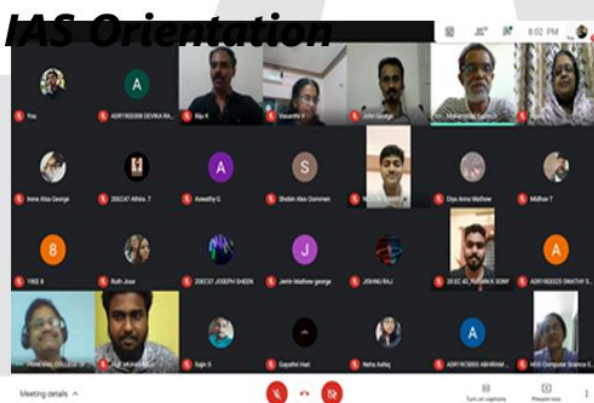
IEEE member and the advantages of networking through IEEE. The program also emphasized the responsibilities of an IEEE member, ways to invoke passion and enthusiasm in others regarding volunteering. After a great and inspiring talk by Dr. Bijuna, the orientation program was wound up by getting feedback from the students and a small session taken by our SB Chairperson, Aswathi on the procedures and steps for being an IAS member and vote of thanks speech by Sreelakshmi.

Inauguration of IAS/IES Jt. SBC CEA

The inauguration of IEEE IAS/IES Jt. SBC, College of Engineering Adoor was conducted on 22nd February 2021. The meeting started officially at 7.10pm in the presence of chapter advisor Dr. John George Sir, chief guests- Prof. Muhammed Kasim (Vice chair IEEE Kerala section); Dr. Bijuna Kunju K (Chair IEEE IAS/IAS/PELS Jt Chapter Kerala section); Dr. Vasanthi V (Vice chair IEEE IAS/IES/PELS Jt Chapter Kerala section); Dr. Biju K (Treasurer IEEE Kerala section) & Mr. Prabin James (Secretary IAS/IES/PELS Jt Chapter Kerala section), the HOD's of various departments, the executive committee members of SBC and members of IAS/IES Chapter and other 25 participants.

The online inauguration function begins with the code of ethics which was given by Ms. Swathi (Secretary IEEE SB CEA) followed by the welcome address which was given by Dr. John George (Branch counselor, HOD, EEE Dept, CEA). Later Mr. Alif Muhammed (Chair IAS/IES Jt SBC CEA) gave the Milestones- IAS/IES CEA. The Presidential address and the Inaugural address were given by Dr. Sunil Kumar (Principal, CEA) and the Chief guest Prof. Muhammed Kasim respectively which was followed by the Guest of Honour by Dr. Bijuna Kunju K. The Felicitation was done by Dr. Vasanthi V; Dr. Biju K; Mr. Prabin James; Dr. Jayachandran E S

CEA); Dr.Manju S Nair(HOD, CSE Dept, CEA) and Dr.Jose Mathew(HOD ME Dept, CEA). Next was the Annual plan presentation and was given by Ms. Athira T(Secretary IAS/IES Jt SBC CEA). Finally the Vote of Thanks was given by Ms.Devika Rani J(Vicechair IAS/IES Jt SBC CEA).The mission and vision of IAS/IES, its mission statement and the views are well explained.The aim is in including technology in the welfare of humanity is safe, reliable, economically viable. 40 IEEE members and 15 others participated in the event.The meeting ended at 8.30pm thanking all the guests and Participants.



Virtual poster

TECH TALKS

IEEE SB CEA in association with the Industrial Applications Society & Industrial Electronics Society SBC CEA conducted Tech Talks as a part of the Rubicon Science Week Celebration. It was a 5 day programme which was organised online through the Google Meet platform from 23rd february to 27th february 2021 at 7.00pm.

Day 1 starts with Mr Sajin Sachidanandan (Vice chair, IEEE SB CEA) & he spoke on the topic 'Wireless Technology'.He gave

an awesome idea on the topic and was taken by Mr Jerrin Mathew George(Secretary PES IEEE SB CEA).He took the presentation on the topic 'Electric Vehicles' and was an enjoyable as well as an informative one.He gave us an idea on various types of Electric Vehicles and their related properties.Mr Flemin K Sony(Secretary RAS IEEE SB CEA) took the presentation on 'The Era of Flying Robots' on Day 3.It was an interactive session and he gave an awesome idea on 'Drones -its working and other related stuffs.Day 4 was taken by Mr Alif Muhammed(Chair IAS/IES Jt SBC CEA) on 'Hyperloop was an informative session.Mr Manu Suresh(Vice chair RAS IEEE SB CEA) present on the topic 'Version Control with GIT' on Day 5 and was also an amazing one. About 70 students actively participated.

SCIGRAPHICO

IEEE IAS SBC SJCTET conducted a Poster Making Competition especially for SJCTETians .The competition was held on February 25th 2021 and the topic was 'Poster For A Science Quiz'. It was an online competition. Students from various departments and degrees participated and it was surprising to see a lot of creative posters.

These posters were of great use for all as each design included different methods. The winner of the poster designing competition was decided based on how well they presented the theme in a single poster. The winner of the competition was awarded with a certificate of excellence. The main aim of the competition was to create self-determination and to dust up the creative young minds.It aims to increase student's understanding of science and the construction of knowledge as well as to promote scientific literacy and responsible citizenship.



Virtual poster

Get Set Pitch!

With regards to Science week, IAS SBC of IEEE SB GEC Palakkad conducted an Idea pitching competition that goes by the line "Get Set Pitch!". There were a total of 14 participants, of which 9 were IEEE members. It was conducted from 21-26 February 2021. Ideas were collected via google forms. The event was intended to bring out the ideas of the students, also to spark an interest in the sciences. The competition was based on agriculture. The topic was "Possibilities of modern technology in agriculture". Agriculture, which stands as a hot topic in today's world, was apt for such a competition. If the ideas are too good and practical, then the students could market their ideas. What the competition provides is just a platform for them to think.

The competition was conducted using google forms, participants provided their ideas in the form, and those ideas would be evaluated later. The participants were given a week for submitting their ideas. The winners were selected by

Mr. Muhammedali Shafeeque K, Assistant Professor, Electrical and Electronics Engineering Department, GEC Palakkad. Winners were selected by evaluating the ideas they had submitted.

Eloquence

IEEE IAS SBC SJCET conducted an online elocution competition 'Eloquence' as part of science week celebrations. The topic was "Importance of Science in Everyday Life". The students were asked to submit their entries in a video format through the link that was provided. The competition was limited only for the students of our SB. The event started on 22nd of February and it came to an end on 27th of February. About 30 entries were received. 21 entries were of IEEE members and the rest were of non-IEEE members. Top three entries were published in our Instagram channel as a token of appreciation. The competition made the participants realize the unlimited utilities that science is providing in our everyday life. It aims to increase student's understanding of science and the construction of knowledge as well as to promote scientific literacy and responsible citizenship.



Virtual poster

PROFAB

IEEE IAS SBC SJCTET conducted an online project presentation programme 'PROFAB' as part of the science week celebrations. The session was conducted exclusively for the little entrepreneurs of SJCTET. It was an innovative event that inspired the students to brainstorm and challenge themselves to see what they could create with their dreams. The competition was limited only for the first year IEEE students of our SB. The event started on 21st of February 2021 and it came to an end on 27th of February 2021. About 80 members registered for the event and these students were grouped into 8 teams. Each team was requested to come up with an innovative idea that can be illustrated in future. Each team had to pitch in ideas in the form of an abstract. The team with the best proposal and idea was selected as the winners and provided prize money worth Rs 3000. This idea pitching competition was a great opportunity for students to reveal their passion in technology and engineering and develop their innovative and problem-solving skills. It aims to help the little entrepreneurs to mould and establish their innovative ideas and to develop their problem-solving skills.

DLP: Multi-Cell and Multi-Level Power Convertors

IEEE PELS SBC VJEC Organized a Distinguished Lecturer Program on the topic "Multi-Cell and Multi-Level Power Converters". The program was conducted on 27th February 2021 at 12.30pm

through WebEx. The DLP was presented by Prof. Dr. Petar J. Grbovic (Head of University of Innsbruck Power Electronics Lab, University of Innsbruck, Austria). The DLP lasted for 1 hour. The participants attained knowledge about multi-cell and multi-level power convertors and its characteristics. There were about 50 participants in the program. The coordinators organized the events smoothly and was well cooperated by the participants.



Virtual poster

IAS Membership drive

IEEE IAS SCT SB in collaboration with IEEE Power and Energy Society SCT SB conducted a membership drive on February 28th 2021 from 12.30 pm to 12.45 pm. The main aim of the event was to show the newly joined IEEE members how to take membership in IEEE Societies particularly IAS and PES. 22 members attended the same via Google Meet.

Sciquest

IEEE IAS SBC SJCTET conducted an online quiz competition 'SCIQUEST' as part of science week celebrations. The quiz was held online on 28th of February 2021 from 12pm -6pm. 39 IEEE members actively participated in this event. The competition aims at fostering the scientific knowledge

of the student. It also encouraged the student to acquire more knowledge about the development of science in different fields. The winners were appreciated and awarded with exciting prizes. It aims at fostering the scientific knowledge of the student. It encourages the student to acquire more knowledge about the development of science in different fields.

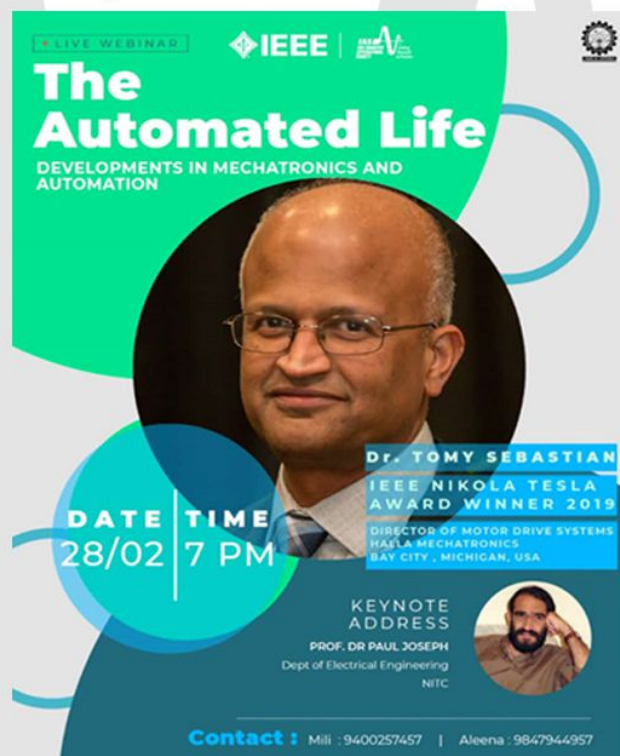


Virtual poster

Webinar on "The Automated Life"

As part of National Science Day, The Industry Applications Society (IAS) of IEEE NITC SB conducted a webinar "The Automated Life" on 28 February 2021. Over 100 participants took part in our webinar to learn about the latest trends and developments in mechatronics and automation. Our main speaker was Dr. Tomy Sebastian, IEEE Tesla Award Winner 2019, Director of Motor Drive Systems, Halla Mechatronics, USA. The speaker gave us an insight on mechatronics and developments in the field. He briefed us about the working principles of a

a car, fuelling, automation and the future of power electronics. The webinar gave a general idea about the future and existing technologies of the electric transportation system and its impact on the environment. He discussed the basic concepts used in the technology relating with best suitable real-life examples for greater understanding. The Q&A session that followed saw high enthusiasm from our participants with several questions on electric vehicles, self-driving cars etc. The session was very interactive. The webinar ended with a vote of thanks by our Secretary, Mili K Johnson. Feedback about the session was collected from all the participants to improve events that will be conducted in the future. E-certificates were given to all attendees.

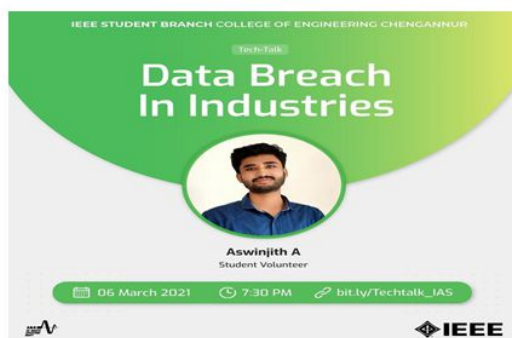


Virtual poster

March

Tech-talk on Data Breach in Industries

IEEE IAS SBC College of Engineering Chengannur organized a Tech-talk on Data Breach in Industries on 6th March 2021. The session was handled by Aswinjith A, an active student volunteer of the Chapter. The session commenced by 7:05 PM with a participation of 53 students. The session proved relevant in these times where privacy and data breach are under question. The speaker explained in detail the various methods in which data breaches are carried out and the threats posed by them. He even suggested some methods to stay digitally safe. Towards the end of the session, he pointed out the tragic lives of some hackers citing the example of one of the most famous computer hackers, Jonathan James. The session was really informative and was well received by the attendees.



Virtual poster

FUN-O-PEDIA

The IEEE IAS SBC Mar Athanasius College of Engineering was delighted to conduct an introductory session on Industry Applications Society along with a TRIVIA on 13th March 2021. The

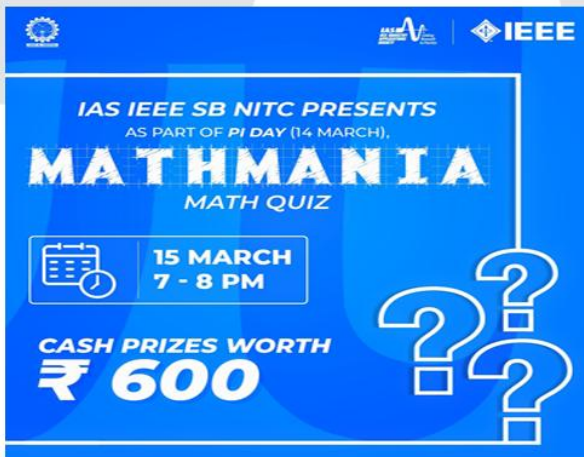
program aimed to make an awareness among the students about what the Industry Applications Society has to offer and how it can aid their professional interests along with this we wanted to keep students entertained as well so a TRIVIA was also conducted in between the session. Around 27 students attended the program out of which 24 were IEEE Members and 3 were Non IEEE Members. Merin Mary Josy, Chairperson IEEE IAS MACE SBC started the session by giving a brief idea about IAS and explained the advantages and benefits of joining IAS. Students got insights into the benefits of the Industry Applications Society. Then the session was handed over to Adrija Nair, Secretary IEEE IAS MACE SBC she explained about the CMD and about the Grants and Scholarships also made students aware of upcoming events. Finally, Praseetha, vice-chair IEEE IAS MACE SBC took the session telling the students about how the IAS is not limited to the Electricals and Electronics dept but also serves the interests of the rest of the departments and also in between the orientation she conducted a small entertainment session, a TRIVIA for the students. Students actively participated throughout the session.



Virtual poster

MATHMANIA

On 15th March 2021, IEEE IAS SBC NITC held a math quiz in honor of Pi Day. Held on our own hosting platform quiz.nitcieee.tech. The quiz was for 8 minutes and could be taken at any time within the 1-hour time frame allotted. The questions mostly pertained around mathematical and history based questions based around the central theme of Pi day. Three winners were chosen and the collective prize cash pool of Rs. 600 was split accordingly. A total of 59 IEEE members and 310 non-IEEE members participated. March 14 marks Pi Day, an annual celebration of the mathematical sign pi. Founded in 1988 by physicist Larry Shaw, March 14 was selected because the numerical date (3.14) represents the first three digits of pi, and it also happens to be Albert Einstein's birthday—the perfect pi-incidence.



Virtual poster

ProScope: Project Mentoring Program

ProScope is a Project Mentoring Program designed to provide students with the understanding about different aspects of projects including identification and analysis of problem statement and solutions, technical design constraints and standards, implementation of project, presentation, and reporting. The program was made virtual and divided into 3 sessions by 3 personalities with a great experience in guiding B.Tech projects with their decades of experience as academicians. The program was conducted in collaboration with IEEE SB JCET, IEEE PES SBC JCET and IEEE IES SBC JCET.

The first session on problem statement and idea analysis was conducted on 13th March 2021, from 4:30pm IST. The session was presented by Mr. Unni A M (Associate Professor, School of Engineering CUSAT). The presentation started with a definition of a problem statement and then discussion went on to different aspects and approaches of problem analysis.

The second session on project design and engineering was conducted on 19th March 2021, from 3:30pm IST and was presented by Dr. Anoop C S (Associate Professor, Department of Avionics, Indian Institute of Space Science and Technology).

The third session was conducted on 21st March 2021, from 4:30pm IST presented by Ms. Deepa A K (Associate Professor, Department of Electronics and Communication Engineering, Sree Chitra Thirunal College of Engineering) explained various skills required to execute presentation and documentation of projects and continued to provide an

insight about the things to be taken care while presenting a project before review committee.



Virtual poster

Mini Workshop on LaTeX

An introductory workshop on the document preparation software, "LATEX" was organized via the online platform, Zoom on March 22nd, 2021 under IEEE IAS Student Branch Chapter IIST. Ms. Deeksha Bhule, Chair IEEE SB IIST welcomed the speakers and the participants. The speakers of workshop were Mr. GGDV Sai Pavan and Mr. Harshith Reddy of final year M.Tech - Power Electronics, IIST. Mr. GGDV Sai Pavan started the presentation with introduction to Latex, followed by step-by-step installation of editor and compiler. Then, an overview about online editors such as overleaf, Authorea, Cocalc, Verboses and various compilation methods available in LATEX was given. Later, the

document structure and the various environment available were discussed in detail. Mr. Harshith started the second session with a brief introduction about Beamer, which is used for making presentation. He discussed about themes, graphics, columns and overlays application in the software. Later an overview on writing IEEE journal, conference paper using the LATEX software was given. The session ended with question-and-answer session. Ms. Deeksha presented the vote of thanks to the speakers. Over 24 participants (12 IEEE and 12 Non-IEEE members) attended the session and got benefited.

Crossword Race

IEEE IAS SBC CUSAT organized Crossword Race on 23rd March 2021. Crossword Race was a competition of word puzzles on the topic Science and Technology held in online mode for IEEE members. At sharp 7:00 pm the first crossword was provided to the teams. Only 7 teams qualified for the next round and they were given the second crossword. 5 teams qualified for the last round and they were given the third and most difficult crossword puzzle. The fastest team won the race. Team Conquerors won the crossword race.

FocusFocus-#talk4 on Career Designing: The pursuit of happiness at work

IEEE IAS SCT SB conducted a webinar as part of the FOCUS FORWARD talk series on 27th March 2021 from 10 am to 11 am IST. The speaker of the event was Dr. Bobby Philip, Associate Professor, Electrical Engineering, SCTCE and Secretary, IEEE PES Kerala Chapter. "FOCUS FORWARD #talk 4" was a one-hour session, the talk

was on the topic "Career Designing: The pursuit of happiness at work". He explained about the importance of being happy at one's workplace. He shared his experience about working in the industry and about switching career paths according to our interests. There was also an open Question and Answer session.

Focus Forward- #Talk5 on A Roadmap To Multi-million Dollar Startup

IEEE IAS SCT SB conducted a webinar as part of the FOCUS FORWARD talk series on 27th March 2021 from 5 pm IST. The speaker of the event was Mr. Avelo Roy, Managing Director and Start-up mentor at Kolkata ventures. Serial Tech Entrepreneur, Investor and TV host." FOCUS FORWARD #talk 5" was a half-hour session, He gave a brief idea about how to establish a startup and kick start your career. He talked about his experience being an entrepreneur and the work it takes so as to be a success in the industry. The event was very successful, we received positive feedback from the participants.

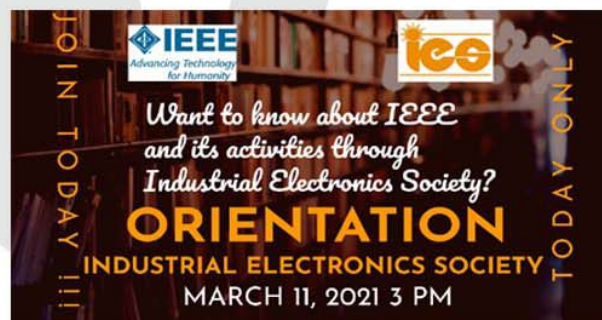
2 Days Machine Learning and Deep Learning Workshop

A workshop on the topic Machine Learning and Deep Learning was held for 2 days which was open to non - IEEE member students too was organized on 27 - 28 th March 2021 by IEEE IAS SBC CUSAT. On Day 1, the event began with a small briefing about machine learn-

ing, differences between artificial intelligence, machine learning and deep learning. Followed by discussions on classifications of classical ML, supervised learning and unsupervised learning and; an introduction to further classifications, classification, regression, clustering, association, and dimensionality reduction. On Day 2, The speaker showed a tool - an online portal, Kaggle - for model making. Later he talked about competitions and courses available in Kaggle. Then he showed how to implement a basic 'cat and dog' CNN. Further he introduced everyone to TensorFlow and Keras - 2 open source machine learning libraries. Subsequently he provided some basic codes to get familiar with machine learning and deep learning model making.

IES Membership Development Session

IEEE IES LBSCEK conducted an orientation programme for our students on March 11th, 2021 at 3 PM. Nivetha K.M., Ruben Mathew, Eldho Babu, Mohammed Musharraf and Govindaraman served as the speakers for the orientation. These are some of the well experienced student volunteers at IEEE IA/IE/PELS Jt. Chapter Kerala. The session was very informative



Virtual poster

April

Arduin Quest

PELS chapter of IEEE SB GCEK in collaboration with the IAS chapter came up with a very interesting event as a part of Arduino Day which was a virtual treasure hunt. The event was named 'Arduin Quest' following the name of the bar which was named after Arduin of Ivrea, King of Italy where some of the founders of the project used to meet. The event was scheduled for April 1st, 2020 from 7 pm to 8 pm.

Virtual Treasure hunt focused on the diverse areas of Basic Arduino. Single participation and group participation in a group of two was allowed. The event was conducted through two platforms: WhatsApp and a website. The website was created using vj.js and hosted using netlify. The event consisted of a total of nine questions to make its path to the treasure. The first ones to crack the 9 questions bagged the first prize. Cash prizes were awarded to the winners, Hridya Prasanth of S1 ECA who won the first prize, and Navaneeth K and Megha M of S1 EC who won the second prize

Fuel for Thought: Virtual Debate Competition

The Industrial Applications and Power Electronics Society in collaboration with the Power and Energy Society SBC College of Engineering Trivandrum, conducted an online team debate competition named "Fuel for Thought" as part of PES Day 2021 celebrations under the leadership of the ambassadors representing CET. An open to all online

debate was conducted on the general theme "Clean Energy" for a team of two members. The preliminary qualifying round (Topic: Are solar and wind energy truly sustainable?) was conducted on 7th April from 5 PM IST to 7 PM IST, from which 4 teams, as chosen by the judges, made it to the final round (Topic: Are Electric cars a viable choice in Developing Countries?) conducted on 8th April. Each round of debate had three sections: Constructive speech, Rebuttal Speech and Conclusion. The energetic and fun-filled debate came to an end with three teams emerging at the top.



Virtual poster

Waste-to-Energy Technology Webinar

The Industrial Applications and Power Electronics Society in collaboration with the Power and Energy Society SBC College of Engineering Trivandrum, conducted a webinar session on the topic "Waste-to-Energy Technology; Providing an Alternative Source of Energy" on the 10th of April 2021 from 9 AM to 10:30 AM IST. The event was organized as part of PES Day 2021 celebrations under the leadership of the

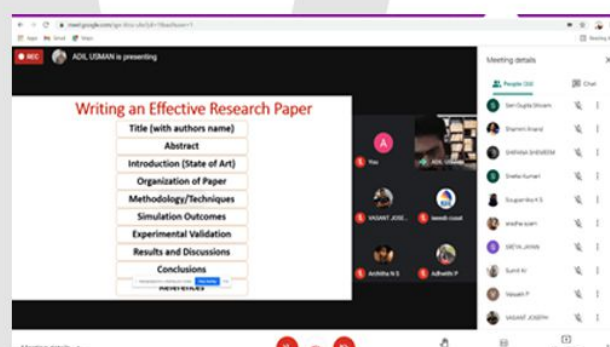
ambassadors representing CET. The session was handled by Mr. Pushpanathan Dharmalingam (Technical Director) and Mr. G.T Deshpande (Vice President (Technical)) from Zonta Infratech Pvt. Ltd. that is assigned with the First WtE Project in Kerala at Kozhikode. A total of 89 participants from all over India including young professionals and undergraduate students from various engineering branches participated in the webinar. The very informative session where participants learned a great deal about the environmental and electrical aspects of WtE power plants, was followed by a Q&A session where the participants raised their doubts. The participants were given a feedback form at the end of the session and Certificates of Participation were awarded to them.

Membership Development Session of IAS

A Membership development session was hosted by IEEE IAS SBC AJCE on 11th April 2021 to acknowledge the SB members about the benefits of IEEE Industrial Application Society. Mr. Govindaraman, student representative of Kochi hub/ MDC, IEEE IA/IE/PELS Jt. chapter Kerala was the speaker for the session. It was worth of time. He gave deep insights about IAS and the opportunities that IAS provides. He absolved many doubts and questions after the session. The abstract of his talk include IAS Grants, Humanitarian contest call proposals, Robotics contest 2021, IAS travel Grants, ECCE, etc. The session put up the curtain by snapping a photo.

Writing a Research Paper A Helpful Guide

This was a webinar conducted on 22nd April 2021 by IEEE IAS SBC CUSAT to help students know about writing Research papers. The speaker of the webinar was Dr. Adil Usman, Senior Member, IEEE, AMIE (I), AMIETE (I), Associate Member, MP-IDSA, Ministry of Defense, Govt. of India; Chair, IEEE MGA SAC-SPAx 2019-2021. He began the session by introducing the different things that needs to be kept in mind even before starting the process of writing a research paper. Discussions on selection of topic, it's novelty, narrowing down of ideas took place. The importance of considering emerging trends and benefits to society was also discussed. Further he talked about making a comprehensive review based on the journals, transactions and papers read as reference. Further he addressed the most important part, defining problem statements and technical contributions using quantitative analysis. Lastly he also discussed grammar and critical writing



Screenshot of the session

TINKERCAMP

The first event of TINKERCAMP was a live webinar on the topic "Getting creative with Tinkercad circuits". The session was handled by Sayanth N S

chief product officer in Deep flow Technologies Pvt.Ltd.He gave an introduction to students about TinkerCad and wiring circuits in it. The session was on 24th April at 5.00 PM and lasted til 5.45 PM. There was a registration count of 143 members and 73 registrants attended the session .The event was overall a great success and became a great achievement for both the IAS chapters. The event was coordinated by Vishnu Muraleedharan of GEC Kozhikode and Anusree Rameshan of GCE Kannur.

Circuit Designing

Circuit Designing Competition using Tinkercad was the second event of TINKERCAMP. Abhishek from GCE Kannur and Anagha E S from GEC Kozhikode were the coordinators of the event. The event consisted of 2 rounds. 1st round was on 25 April at 3 pm. 21 responses were recorded out of which 11 participants were eligible for the 2nd round conducted on 26 April at 8 pm. A cash prize of Rs 350 was given to the first position which was secured by Susmith Das KK 3rd year ECE student from TKMCE and Rs 250 was given to the second position which was secured by Govind S Warriar 2nd year EEE student from FISAT.

Idea Pitching Competition

The event titled idea pitching was the third event. In this event, we gave two problems based on the traffic and road congestion. There were two rounds. In the first round, there were 9 entries. In the final round, five were selected and they were asked to present the idea they

submitted. There was a judging panel comprising three professors from the respectful colleges. The winners were declared, first prize for Susmith Das K K third year ECE student from TKM college of engineering and he brought an idea of an automated platform that carries people and the system can dynamically control the number of people needed to cross and a cash prize of 500/-rupees were given. The second prize was for Nejin Joshy, first-year ECE student of GCE Kannur.His idea was laser-assisted pedestrian crossing in urban areas in the night time and a cash prize of 400/- rupees were given to him.



Virtual poster

CAMP21-M Journey

The third session of Career Mentoring Program CAMP '21 on "My Personal Journey" by Ms. Susan Kathy Land, 2021 IEEE President & CEO, was efficiently coordinated by IEEE IAS SBC RIT on 23rd April 2021 from 6:00 PM to 7:20 PM. The session had participants from various sections and regions. The event was graced by the presence of Prof.

. Muhammed Kasim, Vice-Chair IEEE Kerala Section. Ms. Sreelakshmi V, Vice-Chair IEEE IAS SBC RIT gave the welcome address. Dr. Jalaja M J, Principal- Rajiv Gandhi Institute of Technology Kottayam, delivered the presidential address. Prof. Muhammed Kasim gave a small talk on the statistics of the Kerala Section. Dr. Vincent G, Chapter Advisor- IEEE IAS SBC RIT, delivered the conclusion speech. As a token of love to Ms. Susan Kathy Land and Prof. Muhammed Kasim, IEEE IAS SBC RIT presented their hand-drawn pictures- a work done by Mr. Sreelesh Giri Joint Secretary- IEEE SB RIT. Ms. Adheena V Abraham, Chair- IEEE IAS SBC RIT made the official vote of thanks.



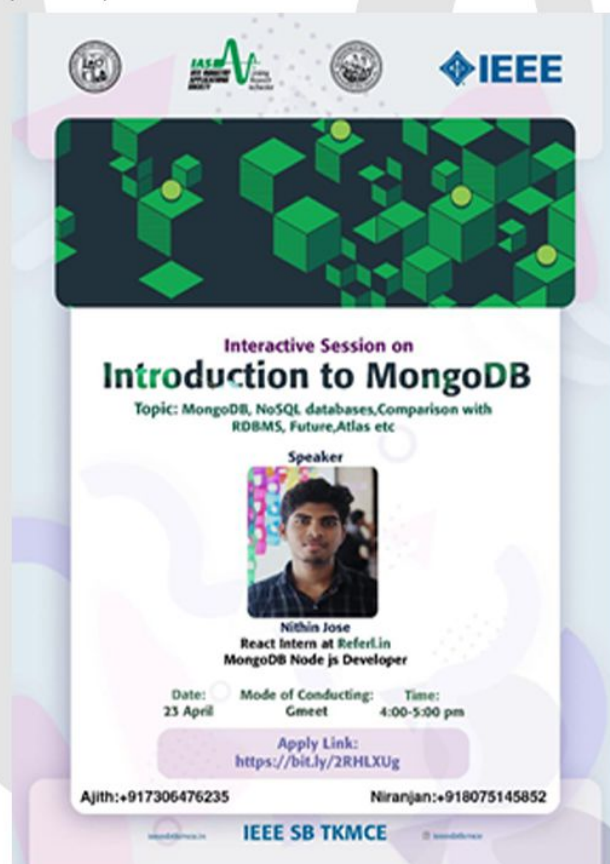
Virtual poster

Idea Pitching Competition

IEEE IAS SBC TKMCE in association with IEI SB TKMCE, on the 23rd of April 2021 organized an interactive session on "Introduction to Mongo DB" handled by Nithin Jose (Mongo DB Node js developer). The event was held online through Google meet and had a total of 42 participants. The speaker raised the importance of database in modern

modern world and explained the advantages of Mongo DB over MySQL. The scalability, flexibility, performance of Mongo DB over MySQL was well conveyed.

Then we had a glance through some of the well-known SQL and non-SQL databases. The discussion on history of Mongo DB's launch and its extensive usage in platforms like Aadhar added a bit of curiosity to the event. There was also a demonstration of database creation where features of Mongo DB was well illustrated. An interactive session was also held towards the end of the session where the speaker answered the queries from participants. Altogether the session was really intriguing and informative and developed really good feedback from its participants



Virtual poster

Quiztronics

On April 24th 2021, 4 PM a technical quiz named 'Quiztronics' was organized by the Industry Applications Society of the RSET IEEE SB. A total of 85+ students from various departments took on the challenge and attended the quiz. It consisted of two rounds and the second round had only 15 students who were shortlisted from the initial bunch. Both rounds were organized on online platforms and proctored for the purpose of the competition's integrity. The questions were based on basic science and in depth electronics questions that required some understanding of the subject. Overall it was a fun event that the participants enjoyed while improving their knowledge in electronics as well.

Webinar on Clean energy revolution – India and China: Opportunities and Challenges

IEEE IAS SBC CEC in collaboration with IEEE PES SBC CEC organised a webinar on clean energy revolution – India and China: Opportunities and Challenges on 24th April 2021. The session was handled by Mohammad Saheer Padinharayil, DAAD Scholar. The session commenced by 10:30 AM with a participation of 35 students. The speaker made a detailed presentation that enclosed the definition of clean energy revolution has garnered great momentum across various countries and is now a great force driving countries to utilize cleaner energy resources. Among the

fastest growing economies worldwide, China and India face a tremendous dilemma in addressing their developmental needs. India's clean-energy initiatives have the wind at their back thanks to global advances in green technology especially solar power, wind power, and energy storage. The session received positive feedback and turned out to be a success as the session was beneficial to the entire participants



Virtual poster

What's all about Volunteering?

H. Jackson Brown Jr. once said "Remember that the happiest people are not those getting more, but those giving more". The quote itself clearly reflects the importance of volunteering and its value towards the society or a particular organization.

For the readers who are hearing the term "Volunteering" for the first time, Volunteering is something that you are doing for a particular organization. Here we are not dealing with the definition or the grammar of the volunteering, we'll just keep this aside and let's talk about the importance of that.

Before entering the field of volunteering, I heard someone say that Volunteering means just working for others selflessly. Actually I would like to make an addition to that above mentioned statement. It is that, even if you are working for yourself, it can be considered volunteering, Volunteering for yourself. A Volunteer is someone who always prepares goals like what that person should do for the organization or for themselves. The importance of preparing goals is that the work provided can be completed within a stipulated time and all the things will be going in a streamlined manner.

If we talk about the advantages of volunteering, then it would need a separate article to go through each and every aspect, but here we shall summarize it, volunteering enhances our technical skills and lets us connect with a world for which we dreamt for. There are

are people who tell me that they don't want small roles, they want only big responsibilities where their managerial skills could be proved. Let me clarify this. It's not about what you are doing or what you are assigned to do, whether it shall be big or small, the dedication to that work or to be precise, the sincerity matters a lot. Or we can say interest, now that's a perfect word to explain. Initially I was assigned with small tasks but I did it with interest, because it's the dedication that made me do that. So the ingredient of Volunteering is Interest.

So, moving on to the conclusion, throughout my article if you count the number of times I mentioned the word volunteering, it would be more than 10, so here we can measure the importance of that. Always remember, preparation of goals is important when it comes to volunteering.



Sooraj V Namboothiri
Student Representative
IEEE IA/IE/PELS Jt. chapter
Kerala