

Industria

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Newsletter

IVTEC
Medhack
Vervecon

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IEEE IA/IE/PELS
Jt. Chapter Kerala



IEEE

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JOINT CHAPTER EVENTS

Phoenix – Power Electronics Quiz

IEEE IA/IE/PELS Jt. Chapter Kerala organized a quiz on 4th August 2020. Phoenix - A Power Electronics Quiz was conducted exclusively for Student / Graduate PELS members of Kerala Section. The quiz was conducted to educate as well as create awareness about various concepts and applications of power electronics in the emerging industries. From many participants, Joel John Kadathil, student from Amal Jyothi College of Engineering won first prize and Rahul Subramanian, student from Government Engineering College Thrissur won the second prize. prize money of Rs1500 was awarded to the winners.



Virtual Poster

MedHack

MedHACK 2020 is a 24 hour online national hackathon organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 7th, 8th and 9th August, 2020. The theme of the hackathon was Advancing technology for public health during pandemics based on which the problem statement

was given to the teams thereafter the commencement of the hackathon. The inauguration ceremony of MedHACK 2020 held on 7th August, 2020 and the Chief Guest was Dr. Chanakya Kumar Jha, SMIEEE, Dean (Research) ISB&M School of Technology, Pune, India. The problem statement was shared with the teams after the inauguration ceremony. The hackathon mainly consisted of three stages; a) Abstract Submission, where the team was to submit the abstraction within 2 hour after commencement of inauguration. b) Interaction with Mentors : During the Hackathon, participants were given an opportunity to interact with their mentors so as to get their doubts cleared. c) Presentation before Judges : This stage was one of the crucial stages where the participants are supposed to present their model virtually with the aid of a powerpoint Presentation. The 24 hour national online hackathon came to its end with the Closing Ceremony and the Chief Guest for the ceremony was Dr. Abhishek Appaji, Assistant Professor, BMS College of Engineering Bangalore, Chair, IEEE SIGHT, Bangalore Section. Dr. Abhishek Appaji, gave a brief overview of the IEEE SIGHT and HAC regarding the proposal submission and funding. He also pointed out various advantages and disadvantages conducting HAC events. After the presentation, numerous queries regarding SIGHT and HAC were cleared.



medhack session

Webinar on Artificial Intelligence models for Solar Energy Applications



Virtual Poster

Webinar on "Artificial Intelligence models for Solar Energy Applications" was conducted IEEE IA/IE/PELS Jt. Chapter Kerala on 12th August 2020. The session was handled by Prof. Vincenzo Pluri, IEEE Fellow, Full Professor, Computer Engineering, Università degli di Milano, Italy. 105 individuals attended the webinar of which 80 were IEEE members. The session included a briefing on how AI can play an important role in the modeling, analysis, and prediction of both the weather and the performance of renew-

able energy. The webinar concluded with a Q&A session where the participants actively put forth their queries. Remarkable feedback was received on the webinar encouraging to conduct more such sessions.

Workshop Series

IEEE IA/IE/PELS Jt. Chapter Kerala in association with inQbe innovations Pvt. Ltd. Kochi organized a workshop series on 26th, 27th and 28th August 2020 for all aspiring B. Tech and M. Tech students. The topics for the series were Microcontroller selection and coding for Power Electronics and Drive Projects, Simulation of Power Electronic Circuits and PV MPPT Simulation. 425 students participated in the workshops. The workshops received positive feedback and helped students dive more into the world of Power Electronics.



Virtual Poster

Webinar on Modelling of Modular Multilevel Converters and Circulating Current Control

A webinar on Analytical Modelling of Modular Multilevel Converters and Circulating Current Control was organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 10th May, 2020 from 5:30pm-6:30pm. The resource person for the session was Dr. Abhijit Kshirsagar, PhD, Electrical Engineer, Researcher and Educator. He's working as Assistant Professor, Dept. of Electrical Engineering, Indian Institute of Technology, Dharwad, India. The webinar was conducted in order to educate the students and members about the significance of Modular Multilevel Converters and Circulating Current Control along with the steps for modelling these devices. The session witnessed the participation of 126 attendees from which 67 participants were IEEE members. At the end of the webinar, a Q&A session was held where the participants vibrantly raised their queries regarding the topic and all the queries of the participants were cleared by the speaker. Remarkable feedbacks were received from the participants describing their takeaways from the session along with mentioning of various topics for the future webinars.



Virtual Poster

Webinar on Differential Power Processing DC-DC Converters for Solar Photovoltaic Applications

A webinar on Differential Power Processing DC-DC Converters for Solar Photovoltaic Applications was organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 18th May 2020 from 5:30pm - 6:30pm IST. The resource person for the session was Prof. Katherine A. Kim, Associate Professor of Electrical Engineering at National Taiwan University, Taipei, Taiwan. The webinar included a brief description of the differential power processing of DC-DC converters pointing out its significance, outreach and application in solar power plant. The webinar witnessed a total participation count of 145 attendees from which 81 participants were IEEE members.

The session ended with a Q&A session where the participants cleared their queries regarding the topic. The feedbacks received from the participants were remarkable and encouraging.



Virtual Poster

Webinar on Solid State Transformers and Their Applications in High Power Renewable Energy Systems

A webinar on 'Solid State Transformers and Their Applications in High Power Renewable Energy Systems' was conducted IEEE IA/IE/PELS Jt. Chapter Kerala on 23rd May 2020 from 6:00pm-7:00pm IST. The resource person for the session was Dr. Harish Sarma Krishnamoorthy, Assistant Professor, University of Houston, USA. Chair, IEEE PELS Young Professionals. The webinar gave a brief description on solid state transformer and its significance in the industry.

The session also emphasized on the application of these transformers in high power renewable energy system. The webinar was open to all B. Tech/ M. Tech students and professionals as well. The webinar witnessed a participation count of 108 attendees from which 60 participants were IEEE members. A Q&A session was held after the webinar on which the participants could clear their queries regarding the topic. The feedback received from the participants were remarkable and encouraging.



Virtual Poster

Webinar on A journey from pulse width modulated Isolated power conversion system to Contemporary Dual Active Bridge Topology

A Webinar on A journey from pulse width modulated Isolated power conversion system to Contemporary Dual Active Bridge Topology was conducted by IEEE IA/IE/PELS Jt. Chapter Kerala on 29th May 2020.

explained the various aspects of power electronics in providing advanced renewable and eco-friendly devices. There was a Q&A session at the end of the webinar where attendees actively cleared their queries regarding the topic from the speaker. The session ended with a vibrant feedback from the participants remarking their understanding and effectiveness of the webinar.

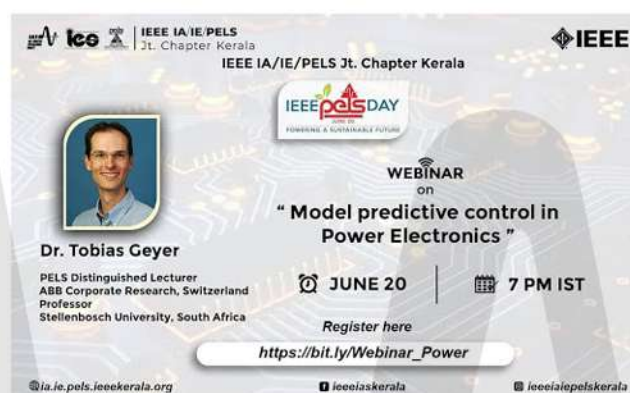


Virtual Poster

Webinar on Model Predictive Control in Power Electronics: A Critical review and recent Industrial Products

A Webinar on Model Predictive Control in Power Electronics: a critical review and recent industrial products was organized by IEEE IA/IE/PELS Jt. Chapter Kerala as a part of PELS Day Celebrations. The resource person was Dr. Tobias Geyer, PELS Distinguished Lecturer, ABB Corporate Research Switzerland. The session was conducted on 20th June 2020 with a participation of over 100 attendees. The session covered a wider range of topics in power electronics on controlling, processing and manufacturing of power elec

tronics on controlling, processing and manufacturing of power electronics products in the industry. The speaker also gave briefing of various efficient and cost-effective products available in the market. Webinar concluded with a Q&A session where the participants actively cleared their queries regarding the topic and a final feedback was taken from the participants which gave a positive remark on the session organized.



Virtual Poster

IVTeC

DAY 1

Inaugural Session



The International Virtual TEC Conclave (IVTeC 2020) organised by IEEE IA/IE/PELS Jt. Chapter Kerala was held from 12th June 2020 to 14th June 2020. The Conclave was led by Dr. Bijuna Kunju (Chair, IEEE IA/IE/PELS Jt. Chapter Kerala), Prof. Biju K (Vice Chair, IEEE IA/IE/PELS Jt. Chapter Kerala), Dr. Vasanthi V (Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala) and Mr. Ruben Mathew (Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala).

The event started with an Inaugural Session for which the Chief Guest was Prof. Toshio Fukuda, IEEE President. The Other Dignitaries were Mrs. Sarada Jayakrishnan (Chair, IEEE Kerala Section), Prof. Muhammed Kasim (Immediate Past Chair, IEEE IA/IE/PELS Jt. Chapter Kerala), Dr. Suresh Nair (IEEE India Council Chair-Elect), Dr. Sameer S M (Immediate Past Chair, IEEE Kerala Section), Er. Harindralal (Chair, Intersociety Relations), Er. Suhair (Chair, IEEE PES Kerala Chapter).

The Welcome address was delivered by Prof. Biju K (Vice Chair, IEEE IA/IE/PELS Jt. Chapter Kerala). He Welcomed the Chief Guest, Dignitaries and the delegates.

The Presidential address was delivered by Dr. Bijuna Kunju (Chair, IEEE IA/IE/PELS Jt. Chapter Kerala). She Welcomed the Chief Guest and other dignitaries. She Mentioned about the increase in IAS, IES and PELS Student Branch Chapters all over Kerala Section. Also she appreciated the increase in IAS CMD Awards in the year 2020.

The session was anchored by Ms. Shivali K A (Associate Newsletter Editor, IEEE

IA/IE/PELS Jt. Chapter Kerala) and Ms. Nivetha K M (Kochi Hub Student Representative, IEEE IA/IE/PELS Jt. Chapter Kerala).

The Chief Guest, Prof. Toshio Fukuda addressed the delegates and explained about the vision and mission of IEEE with the aid of powerpoint presentation. He appreciated the rise in IEEE Memberships globally.

Mr. Sarada Jayakrishnan (Chair, IEEE Kerala Section) addressed the event. She appreciated the Virtual IV conducted as part of the conclave. Also she mentioned in what ways IEEE can be utilised in both Startups and technology.

Prof. Muhammed Kasim (Immediate Past Chair, IEEE IA/IE/PELS Jt. Chapter Kerala) addressed the event and also appreciated the growth of the Joint chapter in two and a half years. Also he wished the IVTeC team for the greater achievements ahead.

The Inaugural Session was concluded by Dr. Vasanthi V (Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala) by expressing the Gratitude towards the Dignitaries and the delegates of the Virtual conclave. She also thanked the volunteers who worked behind the Conclave and made it Happen.

The Inaugural Session was streamed live on the youtube channel

Session on Mechatronics

The International Virtual TEC Conclave (IVTeC 2020) organised by IEEE IA/IE/PELS Jt. Chapter Kerala was held from 12th June 2020 to 14th June 2020. On its first day, 12th June 2020, IVTeC 2020 had its mesmerising session on Mechatronics handled by Dr. Tomy Sebastian, Director, MDS at Halla Mechatronics, USA.

The session started with an introduction to Mechatronics, what exactly it means and how much it has application. Also he explained the History of Mechatronics in the automobile Industry. The session was very much interesting to the professionals as well as delegates. The session went through various aspiring topics including the technological transformations in the modern automobile industry, including the attractive vehicle, the Tesla motors. Also the session went through application of Mechatronics in cars.

Finally, the session ended with various types of automotive parts and its future trends. Following that, QnA was also there and all the queries were cleared. The session was interesting and excellent comments were coming from the participants. The session was moderated by the teams from IIST, Trivandrum.



Session on "Mechatronics"

Session on Opportunities in IEEE IAS

A session on Opportunities in IEEE Industrial Applications Society (IAS) was conducted by IEEE IA/IE/PELS Jt. Chapter Kerala as part of the International Virtual TEC Conclave (IVTeC 2020). The session was handled by Dr. Ing Peter Magyar, Director, IEEE IAS CMD. The session was streamed live in the youtube channel of the joint chapter.

The session started with an Introduction to the IEEE Industrial Applications Society (IAS), the history of formation with initial membership. He appreciated the rise in IAS memberships all over the world. He specially quoted the membership rise in Region 10. This session was meant to provide the students with insights into the various opportunities provided by Industry Applications Society.

The Industry Applications Society, as a transnational organization, is interested in advancement of the theory and practice of electrical and electronic engineering in the development, design, manufacture and application of electrical systems, apparatus, devices and controls to the processes and equipment of industry and commerce; promotion of safe, reliable and economic installations; industry leadership in energy conservation and environmental, health, and safety issues; creation of voluntary engineering standards and recommended practices; and the professional development of its membership.

The above written paragraph about IEEE IAS was clearly explained by Dr. Ing Peter Magyar in the session. He also explained the importance of IAS Chapter Membership Development (CMD) and the awards they are giving. He appreciated the Student Branch Chapters under Kerala Section who received CMD awards.

The session went through various Chapter Development Sessions all over the regions presented with an aid of power point presentation.



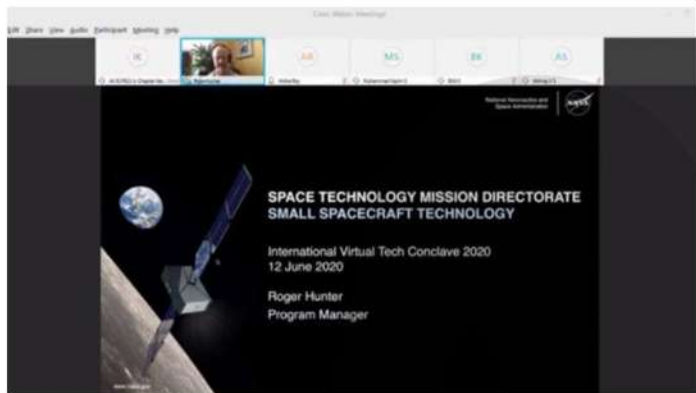
Session by Dr. Ing Peter Magyar

Aerospace Research –Legacy Review of the Kepler Mission

The speaker of the session Mr. Roger Hunter is the project manager for NASA's Kepler Mission, the first mission, capable of finding potentially habitable planets in the Milky Way Galaxy, outside our solar system. Prior to joining NASA, Mr. Roger was with the Boeing Company as Site Manager in Colorado Springs, Colorado. And before joining Boeing, Mr. Roger served in the US Air Force and retired after 22 years of service.

The session on Aerospace research was very interesting and informative. In the session Mr. Hunter discussed his current project in NASA on Small Spacecraft Technology and the legacy of Kepler Mission. Some of the important points discussed in the session are the following. The recently completed U-Class technologies in their missions are integrated solar array and optical communication. The concept of optical communications and sensor demonstration was discussed. Along with this the upcoming U-Class technology demonstrations like CLICK, ACS3 and V-R3x were introduced to the participants.

Mr. Hunter also talked about NASA's important mission for the next year called the Lunar Flashlight and CAPSTONE. Lunar Flashlight measures quantity and distribution of the surface ice deposits in lunar South Pole cold traps with a compact laser spectrometer. Most importantly, the exemplar project, Kepler Mission and the experience they had from it was explained in detail. The session was made more vibrant by showing various original videos and photos of different missions of NASA. The rover in the Kepler Mission on another celestial body was beautifully shown and explained. It really was an unforgettable experience for each and every participants of the conclave.



Session on Kepler Mission

DAY 2

Usage of Tensorflow in ML Applications

The workshop on Usage of Tensor flow in ML applications is a very relevant and important workshop which can help any engineer in today's world. Mr. Bhartendu Thakur has Masters in Machine Learning and Computing. Presently he is working as the Senior AI Engineer at Innovation Incubator. Prior to working in Innovation Incubator he was the engineer at Mercedes Benz Research and Development. His domains of research are Core Machine Learning, CFD Analysis, Autonomous Driving and Generative Model.

Tensorflow is a free and open source software library for dataflow and differentiable programming across a range of tasks. It is a symbolic math library used for machine learning applications like neural networks. Tensorflow was developed by the Google Brain team. Machine Learning is the study of computer algorithms that improve automatically through experience. Machine Learning is a part of Artificial Intelligence and builds mathematical models based on sample data. Machine

Learning involves computers discovering how they can perform tasks without being explicitly programmed to do so. Mr. Bhartendu Thakur helped the students on how to use Tensorflow in Machine Learning applications. The Live session on the Tensor flow software helped all the participants to learn more about machine learning and its application in new technologies. The programming language Python was used in the software and Mr. Thakur explained it using various examples to the attendees. The session was very effective and at the end of the one hour workshop participants could apply Tensorflow into Machine Learning.



Session on Tensor Flow

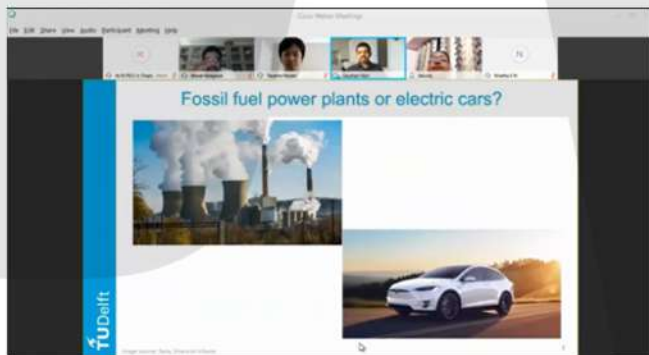
Session on Grid Modernisation



Session on Grid Modernisation

The talk familiarized the participants with a vision for Grid Modernization, focusing on technological advancements beyond Smart Grid. The technological advancements include discussions of key industry/societal trends, Smart Grid concepts, holistic solutions, integration of microgrids and distributed generation, and ADMS software applications. It also covered feeder automation business models, managing different types of data, big data, analytics, enterprise data management, Smart Grid standards and interoperability, and Smart Grid deployments and lessons learned.

Panel discussion on IES Under - 35 Innovators Contest



Screenshot Of Panel Discussion

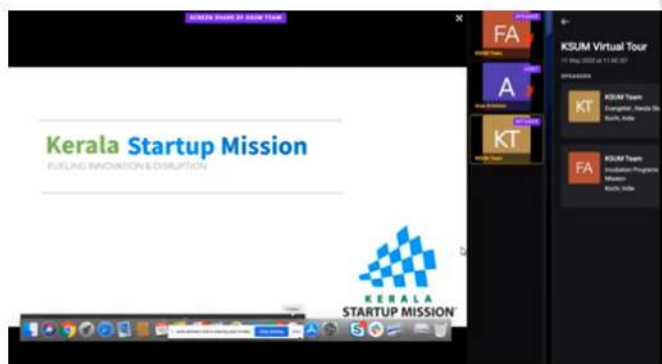
A panel discussion by the winners of IES Under 35 Innovators Contest was organized by the IEEE IA/IE/PELS Jt. Chapter Kerala as a part International Virtual Tec Conclave (IVTeC 2020) on 13th June 2020. The panelists for the panel discussion were Dr. Gautham Ram, Dr. Takahiro Nozaki and Dr. Bharat Balagopal who were the past winners of IES under 35 Innovators Contest. The moderator of the panel discussion was Dr. Bijuna K,

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

The first panelist was Dr. Gautham Ram, Asst. Prof. at T.U Delft University of Technology, Netherlands. He spoke on his innovation on the world's first solar powered direct V2G EV Charger which is a solar powered electric vehicle charger. His team used an Integrated DC solution which can reduce the amount of unnecessary energy losses during the conversion of solar energy received from DC to AC by the EV charger. He highlighted the advantages of this innovation which include bidirectional capability, improved efficiency and low cost charger. The next panelist was Dr. Takahiro Nozaki, Asst. Prof. at Keio University. He spoke about his innovation on Haptic technology. Apart from the conventional force sensors, haptic technology enables transmission, storage, reproduction of haptic information by utilizing the estimated load force applied on the motors. This technology could be used in automation, automatic sorting and packaging systems. The final panelist was Dr. Bharat Balagopal, Secretary of Energy Storage technical committee in the IEEE IES. He spoke about his innovation 'the Smart Battery Gauge' The SBG can be used for continuous battery condition assessment and it involves low energy usage. The panel discussion ended with a Question-Answer session. The delegates were very enlightened with each of the innovations and gave remarkable feedback on the sessions.

Virtual IV to KSUM

A Virtual IV was conducted to KSUM as a part of IVTeC. The instructor escribed the establishment of ISC and how it reached the present manifesto. He mentioned the number of startups working under KSUM and the platforms they provide for encouraging entrepreneurship among the undergraduate students. He described various competitions and challenges hosted by KSUM for the school students as well as college students. He cited various labs and office spaces present in the incredible complex. After the briefing of KSUM, he further took us to the virtual world of KSUM using AR technology. The delegates were able to see the nook and corner of the Integrated Startup Complex just by sitting at their homes. Each floor of the building was shown and explained. The 360° footage was truly mesmerizing and informative. The delegates were able to view the magnificent lobby, colorful workspace, conference halls, Fab lab etc. The building has a very impressive architecture enclosing fancy carpentry, cabins and attractive workspaces. There are three levels of workspaces in the ISC where different startups work depending on their experience and reach.



Virtual IV to KSUM

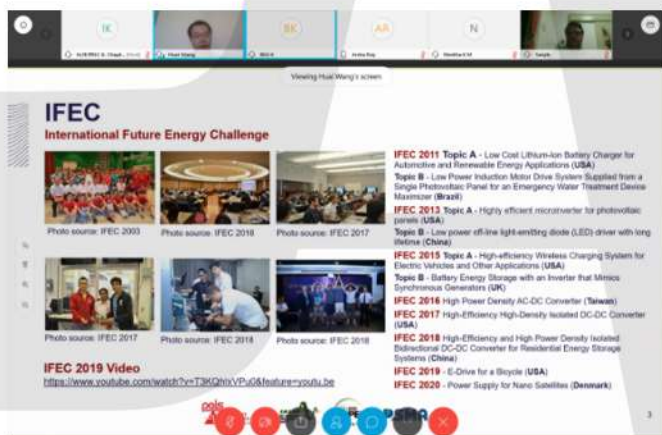
DAY 3

Panel discussion on IEEE International future energy challenge and IEEE

A panel discussion on IEEE International future energy challenge and IEEE Empower a million lives was organized as part of International Virtual Tec Conclave (IVTeC 2020) organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 14th June 2020. The panelists were Dr. Huai Wang, Dr. Sanjib Kumar Panda and Dr. Suryanarayana Doolla and their presentation was based on the schemes, criteria and stages of IEEE International future energy challenge and IEEE Empower a million lives respectively. The moderator of the panel discussion was Prof. Biju K, Vice-Chair, IEEE IA/IE/PELS Jt. Chapter Kerala.

The first panelist Dr. Huai Wang, Professor at Aalborg University, Denmark gave a brief introduction about the International Future Energy Challenge (IFEC). He discussed the IFEC 2020 topic 'Power Supplies for Nano Satellites' and its significance. He concluded his session by giving a brief description about the IFEC 2020 Testing systems and the significance of energy technology. The next panelist was Dr. Suryanarayana Doolla, Professor at IIT Bombay. He remarked about the goals of IEEE Empower a Million Lives challenge and different aspects of the competition. He mentioned the tracks and conditions of the challenge. Thereafter he mentioned various Global Winners and their ideas. The

The final panelist were Dr. Sanjib Kumar Panda, Associate Professor at National University of Singapore. He introduced the Sustainable Micro Grid System proposed by his students as a part of IEEE Empower a Million Lives challenge. He pointed out its advantages and system description which can be used to provide energy without causing any pollution. The panel discussion ended with an interactive session between the delegates and the panelists. Awareness and significance of each challenge were acknowledged to the delegates. The session got very notable feedback from the delegates.



Panel Discussion Screenshot

Fostering Creativity at Workplace

The session started with an explanation of the real meaning of the entrepreneur and entrepreneurship. He explained each and every corner of entrepreneurship. Also about fostering creativity at the workplace. Entrepreneurship can broadly be defined as the creation or extraction of value. With this definition, entrepreneurship is viewed as change, which may in-

clude other values than simply economic ones.

The explanation given above was exactly explained by Mr. Joseph Eapen. Also he mentioned the startup ecosystem and its importance in today's world. He highlighted the importance of innovation in today's world.

WIE Track

The IEEE Women in Engineering (WIE) has always been strong, pioneering and inspiring for everyone. So, in this background, a session in the WiE track is of utmost importance. The speaker of the session Dr. Supavadee Aramvith is the candidate for 2021-2022 IEEE Region 10 Director-Elect. She is also serving as the Associate Professor in the department of Electrical Engineering in Chulalongkorn University, Thailand. Basically, Dr. Supavadee had completed her graduation in Computer Science, but later pursued masters and did PhD in Electrical Engineering which is a vast area of study.

The session was very interesting and inspiring at the same time. Dr. Supavadee Aramvith talked about her real life experiences of joining IEEE and the benefits that she had from the same. Her main focuses are on academic advising, professional volunteering, internationalization, and research or publications. Her IEEE leadership experiences include the following. Dr. Aramvith started IEEE volunteering in 2007 as IEEE Thailand section secretary. Later she has been into Region 10 Educational Activities Coordinator. In the year 2015 she became Region 10 WIE coordi

nator. In 2019, she was the section and chapter chair of Region 10. Presently, she is one of the four candidates for Region 10 Director Elect.

All her life experiences, ups and downs inspired all the viewers of the conclave. She has 25 years membership in IEEE. The emphasis on the importance of women participating in leadership and allied activities were also discussed. Of course, it has personal reflection on one's personal development. The session was very effective and thrilling.



IVTeC Wie Track

Closing Ceremony



IVTeC Closing Ceremony

Prior to the closing ceremony, the sessions from Dr. Supavadee Aramvith, Mr. Joseph Eapen and a panel discussion on future energy challenge were conducted. The welcome address for the closing ceremony was delivered by Dr. Bijuna K, Chair, IEEE IA/IE/PELS Joint Chapter, Kerala. She is also one of the main reasons for the success of IVTeC. The keynote address in the final closing ceremony was given by the chief guest of the day the most respected Prof. Liuchen Chang, President Elect, IEEE Power Electronics Society. He is a fellow of the Canadian Academy of Engineering and the Vice President of IEEE Power Electronics Society. Dr. Chang addressed the gathering with his valuable words which was a great experience.

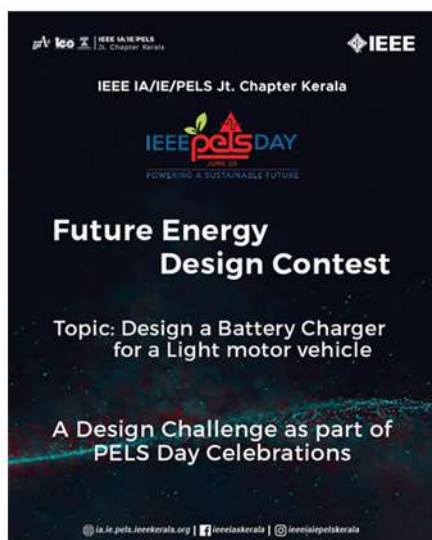
As a token of gratitude, Prof. Liuchen Chang was presented with a virtual memento for gracing IVTeC. The next agenda was felicitation by Dr. S M Sameer, Immediate Past Chair IEEE Kerala Section and an exceptional proactive volunteer from the section. He is the professor of Electronics and Communication department of NIT, Calicut. He also felicitated the gathering with his words of wisdom. Later, he was also presented with a virtual memento from the team of IVTeC.

The closing ceremony was made more glorious by the felicitation from Prof. Nandan S. He is the Chair of student activities IEEE Kerala Section and is currently working as Assistant Professor at LBS Institute of Technology. His talk inspired all the participants when he talked on our

career building and the importance of our passion, strength and market demand in the future of every career aspirant. His session was very motivating and was the need of the hour. Later, a virtual memento was presented to Prof. Nandan for being a part of IVTeC 2020.

Future Energy Design Contest

A design challenge based on conservation of future energy was conducted by IEEE IA/IE/PELS Jt. Chapter Kerala named as Future energy design contest, as a part of PELS Day celebrations. The contest was organized from 17th – 30th June 2020. The theme given for the contest was Design a battery charger for light motor vehicle. The contest was conducted in order to make students ideate and create awareness on the conservation of energy and how technology can impart a great change in energy conservation. An impressive number of teams took part in the challenge and all the ideas and design were remarkable. The first and the second prizes were bagged by the teams from IIST, Trivandrum.



Virtual Poster

Webinar on Shaping the Future of Energy with Microgrids

Webinar on Shaping the future of energy with microgrids was conducted by IEEE IA/IE/PELS Jt. Chapter Kerala on 30th June 2020. The session was handled by Mr. Suhas S, Global Product Manager MGS100, FIMER India. 115 individuals attended the webinar of which 100 were IEEE members. The session included a briefing on how microgrids represent a sort of democratization of the delivery of energy and how microgrids can feature power-generating clients at any point, such as businesses or residences with solar arrays.

The webinar concluded with a Q&A session where the participants actively put forth their queries. Remarkable feedback was received on the webinar encouraging to conduct more such sessions.



Virtual Poster

Webinar on Research Proposal and Grant Proposal Writing

A Webinar on 'Research Proposal and Grant Proposal Writing' was organized by IEEE IA/IE/PELS Jt. Chapter Kerala in association with Educational Activities IEEE Kerala Section on 8th July 2020. The resource person for the session was Prof. Chun Che Lance Fung, Chair, IEEE R10 Educational Activities Committee. The webinar enclosed a wide range of techniques and tips essential while writing a proposal. The speaker showed various types of proposals and explained about how it can be made attractive. Total of 125 participants attended the webinar from which 110 individuals were IEEE members. A remarkable feedback was received from the attendees.



Webinar Poster

Webinar on AC & DC Microgrid control for Offshore Wind Applications

A Webinar on AC & DC microgrid control for offshore wind applications was conducted by IEEE IA/IE/PELS Jt. Chapter Kerala on 29th July 2020. The speaker for the session was Mr. Josep M Guerrero, Professor at AAU Faculty of Engineering and Science, Department of Energy Technology, Aalborg University, Denmark. The session wonderfully covered the significance and usage of AC and DC microgrid control for offshore wind applications. A total of 115 individuals participated in the session of which 100 were IEEE members. The session received marvelous feedback from the participants.



Webinar Poster

Webinar on Medium Voltage Adjustable Speed Drivers Upgrade



Virtual Poster

IEEE IA/IE/PELS Jt. Chapter Kerala organized an IAS Chapters Virtual Meeting Program on Medium Voltage Adjustable Speed Drives Upgrade on 27th August 2020 from 7:00-8:00PM IST. The resource person for the session was Mr. Dave Durocher, IEEE IAS President (2015-2016), IEEE Board of Directors (2019-2020). He served as Global Industry Manager for more than 40 years at Westinghouse and Eaton. 115 individuals participated in the webinar of which 100 participants were IEEE members. The webinar enclosed a wide range of aspects on medium voltage adjustable speed drives upgrade. The session got a very remarkable feedback.

Webinar on Design for Reliability in Power Electronics System

A webinar on Design for reliability in power electronics system was organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 16th September 2020. The resource person for the session was Prof. Frede Blaabjerg, President – IEEE PELS. The speaker wonderfully covered all the topics essential for reliable designing of Power Electronics systems. 150 members participated in the webinar of which 130 were IEEE members. A very positive feedback was received from the participants.



Virtual Poster

Vervecon : WIE Initiative



Virtual Poster

IEEE IA/IE/PELS Jt. Chapter Kerala is organizing a spectacular event, Vervecon, encompassing workshops, quiz contests and a symposium exclusively for the women members. The event commenced on 11th September 2020 with an inauguration ceremony. The event was inaugurated by Ms. Pooja Singh, IEEE IAS CMD WIE, Subcommittee Chair. She congratulated the event and briefed about the importance and scope of women in engineering and industry. The ceremony also included addressing of Dr. Bijuna K - Chair, IEEE IA/IE/PELS Jt. Chapter Kerala, Dr. Biju K - Vice chair, IEEE IA/IE/PELS Jt. Chapter Kerala and Dr. Vasanthi - Secretary, IEEE IA/IE/PELS Jt. Chapter Kerala.

Workshop on Deep Learning using TensorFlow 2.0-Vervecon

As a part of Vervecon, IEEE IA/IE/PELS Jt. Chapter Kerala organized the first workshop on deep learning using TensorFlow 2.0 on 13th September 2020. The speaker for the workshop was Ms. Usha Ranganaju, Data Science Consultant at Infinite - Sum modelling Inc. The workshop explained the significance and utilization of TensorFlow 2.0 in deep learning. Ms. Usha explained and demonstrated various diagrammatical and statistical examples on deep learning using TensorFlow 2.0. The workshop enlightened the participants with the deep learning tools and simple techniques to comprehend the software. A total of 125 students participated in the workshop, from which 100 were IEEE members. A very positive feedback was received from the participants. Further, a quiz contest based on this workshop was conducted on 20th September 2020 for encouraging the students to actively learn and comprehend the topic discussed in the workshop and test the knowledge gained.



Virtual Poster

Talk on Ways Technology is changing Engineering- How to keep up with the pace - Vervecon

IEEE IA/IE/PELS Jt. Chapter Kerala organized a talk as a part of Vervecon on Ways Technology is changing engineering- How to keep up with the pace. The session was conducted on 27th September 2020 by Ms. Latha Chembrakalam, Vice President, Power Train Systems, BOSCH, Bangalore. The session beautifully covered various technological changes and its impact on engineering. Ms. Latha pointed some grasping methods that might help the young girls to be in pace with the evolving technology. She emphasized on the need to be brilliantly knowledgeable about basic concepts of each evolving technology in the present time. A vibrant crowd of 141 participants

each evolving technology in the present time. A vibrant crowd of 141 participants attended the session. The session got a massive positive feedback from the participants.



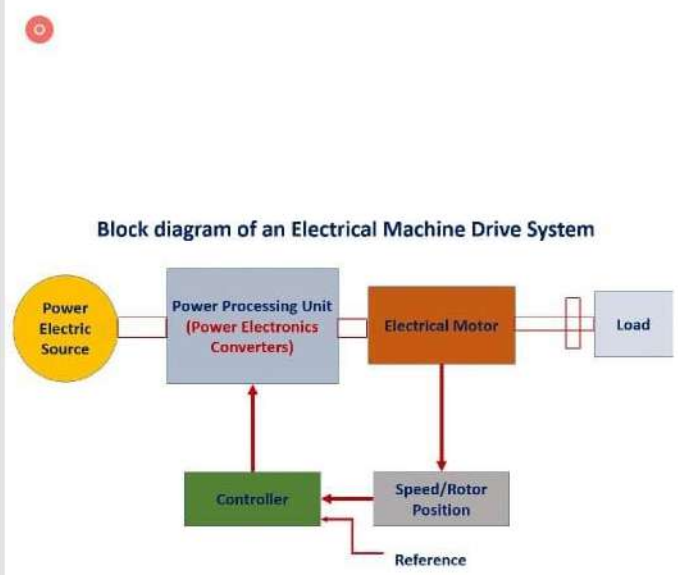
SBC EVENTS

Webinar on Car Driver Assistance System

IEEE Student Branch College of Engineering Karunagappally in association with Industry Applications Society conducted a webinar on Car Driver Assistance System by Dr. Peter Magyar, Director IAS Chapter, Development Past Chair, IEEE IAS CMD on 21st May 2020 at 7:30 pm. In his allotted time, Dr. Peter managed to quite effectively envelop all the major spectrums relevant to his topic. He started off with basic mechanisms of Driver Assistance System and even gave a brief overview of Advanced Driver Assistance System. His presentation slides were quite enticing as they enrolled the fundamentals of the images of certain systems and their protocols. A spotlight was also given to Parking Assistance as even some of the experienced drivers at times might struggle with parking their vehicles due to numerous restrictions that might come up. He explained how these automated systems use certain special scanning systems to bring about its smooth functionality. While talking about the automated ideology, the intelligent headlights were introduced and its basic working was plained to the students. Dr. Peter focused on the importance of protecting one's vehicle amidst the turbulence of crime and portrayed few techniques of owners identifying cameras to avoid robbery. One of the most astonishing parts of the session was the servomechanism of the

cruise control. The idea was known to most of the students however the simplicity behind such an innovation was something that they looked forward to learning more about. The overall session can be marked as an imprinted success as the number of attendees was around 62, evident of the fact that the session was able to open the creative portal in the student's mind. The attendees gave enormous positive feedback encouraging us more to organize such technical seminars.

Webinar on Emerging trends in Electrical Machines Drives: Design and Application



Webinar Content

IEEE SB CEK in association with Industry Applications Society organised a webinar on "Emerging trends in Electrical Machines Drives: Design and Application" by Mr Adil Usman, Senior Member IEEE, Phd Ilt Mandi, Chair IEEE MGA-SAC-SPC (R1-R10), Member IAS-PES Electrical Machinery Committee 2020 on 27th May 2020.

The backbone of the topic seemed quite enticing and evidently proved to be more amusing as Mr. Adil stepped in deeper to expose the true insight of his session. He explained the purpose of such an electric drive system through detailed graphs and block representation for the better understanding of the attendees. He explained the basic individual components needed in such a system including power converter, load, electrical machine, controller (Field Programmable Gate Array). He gave an overview on various modes of such systems and specified various applications of each mode. The speaker quite effectively blended in with the technical restrictions and demands, his ideas of increasing the system's performance by the selection of electrical drives. As the concepts of such a system became clear, he moved on to the development of advanced electrical drive systems using brushless synchronous motor and FPGA based controllers, and explained each and every basic component constituting them. Mr. Adil gave an overview of the modelling, working and flow of the whole system using various diverse diagrammatic block representations with detailed functioning and graphs.

The session was quite a revelation on the elevating developments in technology with attendees being around 74. The participants dynamically participated to calm out their curiosities and entangle their doubts. Empowering sessions like this involving experienced and established personalities are indeed to look forward to as their footsteps are going to lead us to the unimaginable innovations.

Webinar on Decision points in Career and Life and being a Volunteer



Webinar Content

IEEE Student Branch college of Engineering Karunagappally in association with Industry Applications Society organised a webinar on Decision points in Career and Life and being a volunteer by Anthony C. Davies, Military Service, British Army, Region 8 History activities coordinator, on 20th July 2020 at 7:00 pm(+IST). He focussed mainly on the importance and need of career decision points that can literally upturn our lives in seconds. He mainly targeted at making the students realise that it is okay to be confused sometimes when we have a plethora of opportunities however that one must never give up and just follow the heart's desires strategically to reach their goals. He recalled the well known fact that decisions to control our lives are totally in our own hands. His presentation slides were quite enchanting; they enrolled the fundamentals of the various stories, and proven examples that made his view-point stronger. He explained the fast track career growth for people who love challenges, are ambitious and want to push their limits. He discussed the trade-off between a well-paid job and a well-loved job and how to mitigate the stress in certain situations. He also discussed how volunteering affects our life and how being a Volunteer focuses on nurturing such networking with people from divergent backgrounds, building others' capacity as well as how it is an explicit platform for one's own technical and character development.

Most astonishing part of the session was about the topic "Young and dynamic culture" wherein he conveyed the importance of time and hard work and also about the persistence and patience one might need to improve in the respective work environment. We take off to mountains or beaches to recoup at least once a year and ensure we get together at the end of each quarter, and that is how he managed to express the firm belief that the work environment has to be balanced and made flexible by one's own perspective.

The number of attendees was around 62, and hence the session was effectively able to offer an awareness about new opportunities and the purpose of Volunteering as it offers essential help to worthwhile causes, people in need, and the wider community. The participants gave enormous positive feedback encouraging us more to organize such technical seminars.

Webinar on Technical challenges in the Development of Jupiter Bond Interplanetary Spacecraft

IEEE SB CEK in association with Industry Applications Society conducted a webinar on Technical Challenges in the development of Jupiter Bond Interplanetary Spacecraft by Pablo Narvaez, Principle Engineer, Section 513 Manager, Reliability Engineering and Mission Environment Assurance, Jet Propulsion on 30th July 2020 at 7 pm (+IST). The session was informative beyond expectations as Mr. Pablo utilized his experience in the field

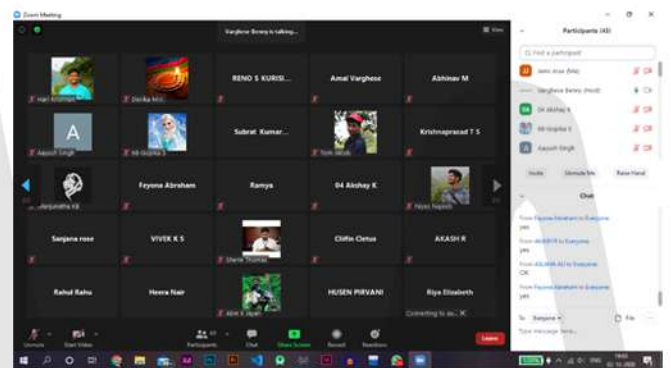
of Space Science and Jet propulsion while providing key elements in Exploration and Space craft. Within his allotted time, he managed to quite effectively envelope all the major spectrum relevant to this topic. He started off with GPS RF sub systems and its critical functions for spacecraft and positioning in orbit. His Presentation slides were absolutely brilliant in which he included the 3D overview of several fundamental bodies in space and other images of instruments.

The lecture discussions consisted of the trending topics like wireless, other communication system modelling as well as the classical electromagnetic emissions and their applications. The spotlight spread around as he explained the elementary PCB design for modelling with the approach of pulse Rise through Pico-seconds. He was quite aware of making the attendees understand that he as well as the team had undergone lots of challenges and shared his experiences and overview of several space missions organised under several Space organisations such as NASA.

The attendees were absolutely mesmerized by all their doubts regarding different modelling design to control electric and magnetic systems and as they deeply learned how to plan and organize such missions through Mr. Pablo's own experiences. He inspired all the attendees who wish to study space science and missions by his interactions and life examples. The overall session was an incredible success as the number of attendees were around 65.

The Q/A sessions were very interactive wherein the students and the SB team expressed their gratitude to Mr. Pablo Narvaez for all his contributions and efforts while the latter expressed his pleasure to be able to mentor the youth!

Workshop on PCB Design using Proteus Software



Workshop Content

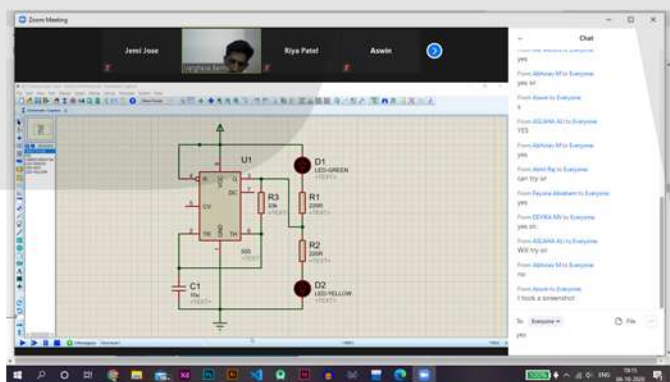
IEEE student Branch college of engineering KARUNAGAPALLY in association with Women in Engineering Affinity Group and Industrial Application society organised "SHE TECH SERIES 2.0" a 3-day workshop on "PCB Design using Proteus Software". The workshop was handled by Mr. VARGHEESE BENNY Founder and CTO RABBIT SQUARE LLP on 2nd, 3rd, and 4th October 2020 under Zoom Meeting platform.

DAY 1

The first day session started from 6:30 pm and the speaker gave a brief introduction to PCB design by sharing some images of different types of PCB's, circuits, boards etc.

There were attendees from all branches and from different states. Hence on the first day the speaker just tried to provide all the basics of electronics from component level. He showed samples of various components like resistors, transistors, diodes, led, then higher components like microcontrollers, integrated circuits then boards like Arduino, breadboards, PCB etc. He fabricated the session more interactive by asking the specifications of each component as well as it's working then identification of various parts and many of them responded with different varieties of answers. After that he explained the working of some basic components and the session ended at 09:00 pm after discussing all the doubts.

DAY 2



Webinar Content

On the 2nd day of the workshop (3rd October 2020) the session started at sharp 6:30 pm. The session kicked off with the introduction of an idea on materials used in PCB manufacturing its parts functions etc. It sustained with the set out of all the procedures for designing PCB using

Proteus software for which he made sure that each attendee installed all the required software and helped those who faced some problems while starting the software and finally directed in managing to install libraries. Then he made up 5 groups of 9 members each by arranging break out rooms where the team members discussed their ideas and started arranging the components as seen from the circuit diagram. He verified the designs of some of the attendees and discussed with them and corrected all the mistakes and the group session ended by 8:25 pm. At the end everyone gathered again for discuss and clear all the doubts individually.

DAY 3

In the 3rd & final day of the workshop (4th October 2020), the session started by clearing all the queries of the previous session individually with the limited time and the speaker grouped them in break out rooms after assigning tasks. After completion of the designing of some teams, he explained the stimulation and all of them were doing accordingly in the same manner and at last the layout design and circuit was comparably the same as that of PCB. After the completion of the design at 8:25 pm there was a doubt clearing session in which the attendees interacted well and apart from the doubts on Designing and software implementation, they are keen to know the opportunities of electronics in various IT field as well as core field and lastly then briefly discussed the importance of

programming languages to get into core field and explored out the trending fields like IOT Robotics, embedded technology etc. And during the conclusion of the session he shared his experience in the field of consumer electronics and explained how to establish Start-ups etc.

The overall session can be marked as imprinted success and the number of attendees was around 50, evident of the fact that the session was able to open a new era of creative portal in students mind. The attendees also gave positive feedbacks in encouraging us more to organize this type of technical workshops more and more.

Workshop on FPGA



Virtual Poster

An online workshop on FPGA(Field Programmable Gate Array) design using the Vivado design suite was conducted by IEEE Industry Applications Society Student Branch Chapter RSET on 3rd May, 2020 in Google meet platform. The session was handled by Mr. B EDMOND BARNABAS ENOCK, Assistant Professor, College of Engineering Munnar. 37 participants had registered for the event and got 23 active participants throughout the workshop. Vivado design suite software was introduced to the participants and discussed various tools in it. Detailed explanations about programmable gates and FPGA were given. It was a 1-hour learning session. Students were able to understand what FPGA is and design them using the Vivado design suite.

Proteus Design Suite Online Workshop

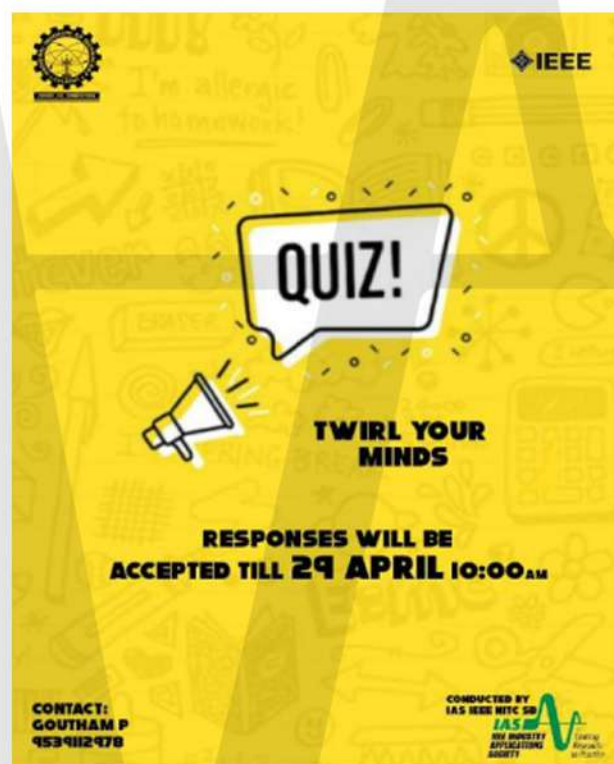
An online workshop was conducted by the IEEE Industry Applications Society Student Branch Chapter RSET on 15th May, 2020 in Google meet platform. The session was handled by Mr. Nith-eesh Kurian, Faculty advisor IEEE IAS SBC RSET, Assistant professor, Department of ECE RSET. 107 members attended the event and 87 active participants participated throughout the workshop. Proteus design suite software was introduced to the participants. Detailed explanations about different tools were given. It was a 1-hour learning session that was successfully

completed and the participants got comfortable with the software. On the completion of the webinar, the participants were able to know the importance of PCB designing.

Webinar on Impact of Artificial Intelligence on Industries

An online webinar was conducted by the IEEE Industry Applications Society Student Branch Chapter RSET on 1st July, 2020 in Webex platform. The session was handled by Mr. Vishal Singhal, AI Solutions Specialist, and founder of Disrupt 4.0. 99 students attended the webinar. The objective of the webinar was to highlight new possibilities of employment through skill up-gradation and it also highlighted how AI technologies can be deployed for organizational efficiency improvement. The speaker was able to briefly cover the details about AI technologies and its impacts in the technical field, medical industry, education field, etc. On the completion of the webinar, the participants were able to know the importance of skill up-gradation in this post-pandemic era.

spread awareness on the medical precautions required during such trying times. The winner of the quiz was Mr.-John Johnson who had secured 18 marks out of 20. The second and third prize was bagged by Mr. Rajeev KR and Ms. Maya S Nair respectively with 16 and 15 points each. Merit Certificates issued by IEEE NITC would be sent to their respective email ids. A total of 645 people responded for the 5 min quiz. Out of those, there were 334 valid scores.



Virtual Poster

Corona Awareness Quiz

An online coronavirus themed intra college quiz was conducted by the IEEE Industry Applications Society SBC of NITC from 27th April to 29th April, 2020. The main aim of the quiz was to debunk the myths regarding coronavirus and also to

Webinar on Augmented Reality and Virtual Reality

The IEEE Industry Applications Society Student Branch Chapter of NITC conducted a webinar on Augmented Reality and Virtual Reality as a part of Comet organized by IEEE IA/IE/PELS Jt. Chapter Kerala on 1st May, 2020. Webinar was open for all colleges and was led by the esteemed alumni, Mr. Ashik Ahmed. The registration was via Google Forms. 151 registrations from different colleges were received out of which 71 attended the webinar. Mr. Ashik who handled the webinar is a Google Panchapakesan Award recipient too. The main highlight of the event was a discussion session after the talk followed by a doubt clearance time. The session was recorded and shared. The main objectives were to initiate a habit of online learning among college students during these lockdown days and keep them updated with the latest technology of the time. The webinar could achieve the goals and had received excellent feedback from the participants. There were a total of 151 registrations of which 71 attended the webinar.



Webinar Poster

Webinar On Decision Making

A webinar on Entrepreneurship was organised by IEEE Industry Applications Society SBC NITC in collaboration with Interface, Malabar's largest student-run start-up accelerator. Major Aneesh Gurudass, a well experienced Motivational speaker trainer, handled the session on 6th May, 2020 from 7:30 – 8:30 pm. The session was made in a view of making the process of taking complex decisions in life very comfortably. The speaker astonished everyone with his wonderful way of making complex decisions. He constantly told attendees to just follow the evidence if you were confused at any point of time with their own decisions. He further added that we must take some

important decisions very spontaneously without wasting time. Finally he gave time to attendees to ask any kind of questions in decision making without obligation. The webinar succeeded in making people aware of taking complicated decisions much more comfortably. Webinar also received excellent feedback and certificates were given for all who attended the webinar. There were 53 participants of which 4 were IEEE members and 49 non IEEE members.



Webinar Poster

Webinar on Marketing

A webinar on Marketing was organised by IEEE Industry Applications Society SBC NITC on 8th May, 2020. The webinar was conducted by Mr. Manoj Govind the Executive Vice President. CLAP International School of Business, he is an experienced trainer in the field with over 25000hrs of training experience. The lecture started



Webinar Poster

off with the explanation of the importance of changing our perspective, while incorporating an intelligent analysis when marketing a product. Details of how to analyze customers, the types of customers, the stages of customer life cycle marketing marketing strategy etc were discussed. topics like market segmentation, market targeting and market positioning were discussed in detail. He also explained how the current consumer is now a "prosumer". The webinar finally ended, leaving the audience with a new insight into the world of marketing, and a fresh perspective of the world of finance. The no of attendees peaked at 41, with a recorded feedback

Talk on Business Development

webinar on Business Development and Entrepreneurship was organised as part of the Online Webinar Series conducted jointly by Interface and IEEE IAS SBC NITC on 12th May, 2020.

The speaker was Dr. Kishore Kumar Muralidharan, who is an Entrepreneur with over 27 years of experience in varied fields across the industry. The webinar was conducted in Google Meet from 7:30 - 8:30 pm. The session taught the participants how to set up their own startups, making them aware of the ins and outs of the industry, the common mistakes people make and also how to raise funds. There was good interaction between the participants and the speaker. The feedback of the participants were positive. The vote of thanks was given by Vishrut, a second year second student at NITC. A total of 17 people attended out of which 3 were members of IEEE. The participants were from varied backgrounds like students, working professional and educational instructors. The expected outcome of the webinar was to get the participants to start thinking as an Entrepreneur.

Webinar on Entrepreneurship

A webinar on Entrepreneurship was organised by IEEE Industry Applications Society SBC NIT in collaboration with Interface, Malabar's largest student-run start-up accelerator. Mr. Harish Kumar, a trainer in this discipline for more than 25 years handled the session on 18th May from 7:30 – 8:30 pm. The trainer is a reputed human resource management trainer, business trainer as well as a motivational speaker. The session gave an insight to every aspect of it takes to be an entrepreneur right from scratch. The trainer constantly interacted with the attendees and the examples he quoted were quite relatable. He stressed on the necessity of a worthy purpose, democratisation as well as marketing strategies. He mentioned several start-up accelerators and incubators who we can look forward to getting assistance with. The webinar served the purpose of educating the novice about the immense potential and possibilities of entrepreneurship and received excellent feedback. Certificates were provided to the attendees. There were a total of 37 participants of which 4 were IEEE members and 33 were non IEEE members.



Virtual Poster



Virtual Poster

TechUp LockDown

A quiz competition was hosted by IEEE IAS SBC NITC on the 29th June, 2020. TechUp LockDown was conducted with the idea of inducing curiosity in the attendees in the latest innovations in the tech world, it aimed to further the growth of tech by inspiring them to become the inventors of tomorrow. The quiz contained a set of 10 questions designed to achieve the above mentioned goal, the questions for this iteration of the quiz leaned towards VIRTUAL REALITY AND AUGMENTED REALITY technologies and the developments in the field. This theme was selected to complement the knowledge given through webinar series on the same. There were a total of 83 participants of which 10 were IEEE members and the highest score recorded was 24 out of 30.



Virtual Poster

Webinar on Application of Nanotechnology in Cooling Systems for Thermal Power Plants

A technical webinar on Application of Nanotechnology in cooling systems for thermal power plants was organised by IEEE IAS SBC NITC on 1st July, 2020. The speaker was Dr. Sajith V, Associate Professor, School of material science, NIT Calicut. The project was developed by his team as a part of industrial collaboration of NITC with NTPC RnD department and currently undergoing patent filing. He is an experienced researcher in the field of nanotechnology and has published many research papers. The webinar began with a brief talk on the basics of nanotechnology. The session taught the

participants the various stages of an laboratory experiment and how it is actually deployed in a thermal power plant. There was good interaction between the participants and the speaker. After the talk, there was a Q&A session in which many participants asked their doubts and all of them were answered satisfactorily by Dr.Sajith. The feedback of the participants was positive. The vote of thanks was given by Goutham, a member of IAS Society, IEEE NITC. A total of 69 people registered out of which 25 people turned up.



Webinar Poster

Just a Minute (JAM)

Just a Minute (JAM) is a one minute speech competition which was conducted by IEEE IAS SBC GCEK on 18th April, 2020. The competition was open to all. Considering the present scenario, JAM focused on bringing out the ideas of stu-

dents on the topic 'Role of technology during corona days' in which the participants talked about the impacts that technology could create and at what extent it is used now. They shared the ideas they have in their head as well. Out of 14 participants, Prajul G's (S4 ECE, GCEK) walked off with the first prize and Sneha Kadangot (S6 CSE, GCEK) bagged the second prize.



Webinar Poster

Webinar on LiFi

The IEEE Industry Applications Society SBC GCEK conducted a Webinar as part of COMET which is an SBC Level initiative by IEEE IA/IE/PELS Jt. Chapter Kerala on 3rd May, 2020. The webinar was about "LiFi" and was handled by Hareesh K,

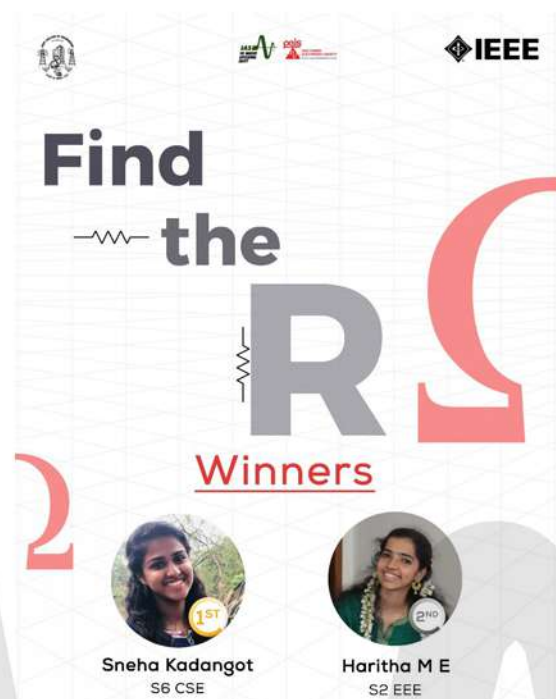
Assistant Professor, Department of ECE, GCEK. The webinar was conducted in Google Meet platform and was open to all. The session saw a good participation as it was about an interesting topic and he talked about the introduction and also the various possibilities of Light Fidelity and kept the whole crowd engaged throughout the session. The participants were very active and had a lot of doubts which were later cleared by the speaker. The session ended on a good note, and was really informative.



Webinar Poster

Find the 'R'

Find the R was a quiz competition in which the domain was questions related to Resistors. The IAS and PELS Chapter of IEEE SB GCEK collaborated together and conducted the same on 24th June, 2020. The event was exclusively for IEEE members of GCEK. Out of 24 participants, Sneha Kadangot (S6 CSE, GCEK) bagged the first prize and Haritha M E (S2 EEE, GCEK) bagged the second.



Winners of Find the R

Rig It Up

IEEE IAS SBC GCEK conducted a logic circuit designing competition "RIG-IT-UP" to test the knowledge of electronics among students. The event was conducted on 22nd August, 2020. It had 2 levels, level 1 included a quiz which was conducted at 10am and level 2 included a logic circuit design competition using circuit lab software at 2 pm. Almost 50 students took part in this and among them 3 were declared as the winners. The first prize was bagged by HARITHA ME of PORTICO WARRIORS, second prize was bagged by PRAJUL G of CICADA 3310 and the third prize was bagged by RITHIKA DAMODHARAN of ILLUMINATI.



Winners of Rig it Up

Memory Nomad

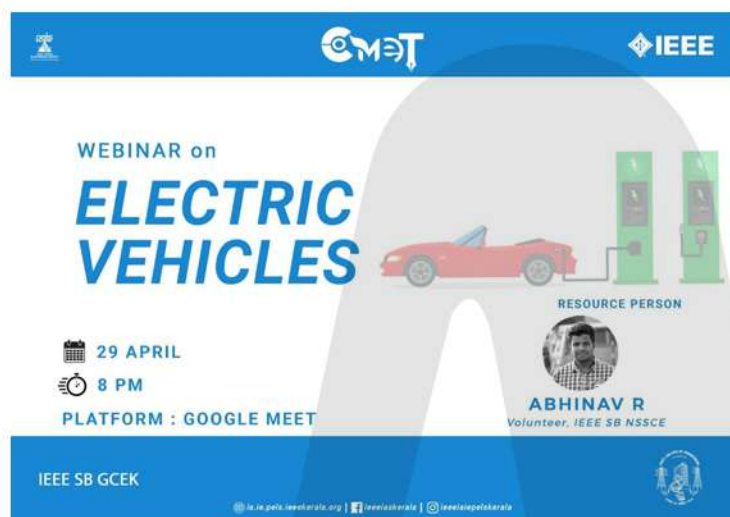
As part of the second phase of COMET, IEEE PELS and IAS SBC's of GCEK conducted a quiz competition "Memory Nomad" on 28th September, 2020. The platform used was "testmoz" and the quiz was active from 7.30pm - 7.50pm and it was exclusively for the IAS and PELS members. Questions had 3 parts, 2 of them were based on the webinars conducted as part of phase one of comet which are Electric Vehicles and LIFI, the third part was based on general technology. A total of 22 society members participated and Jishnu k of S3 ME and Najila T of S3 ECE bagged the first and second position respectively.



Webinar Poster

Webinar on Electric Vehicles

IEEE Power Electronics student branch chapter of GCE Kannur conducted a webinar in order to advance the quarantine and to give a spark of knowledge to students. The webinar was conducted in Google meet and was handled by Abhinav R who was an active volunteer of IEEE SB NSSCE. The webinar mainly focused on the common doubts that arise when you think of an electric car like the efficiency of electric cars, how much it will cost to charge how long will the battery last etc. The webinar was really interesting and a huge participation of students was also seen. Almost all the doubts were cleared by the speaker and it ended in a good note.



Webinar Poster

Power Up- Power Electronics Quiz

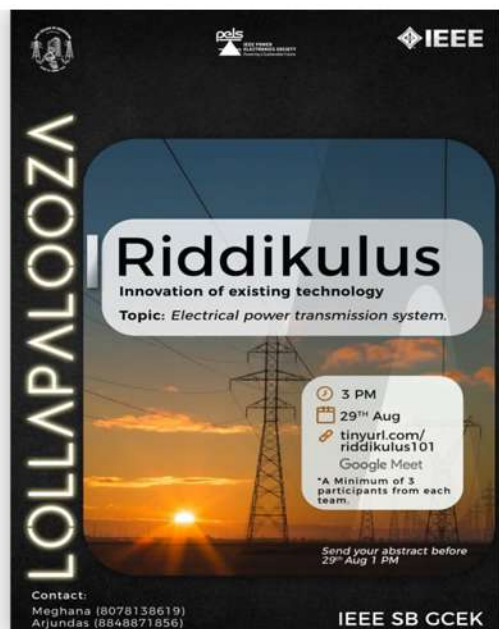
As part of PELS day celebrations, IEEE Power Electronics Society of IEEE SB GCEK conducted an electronic quiz "Power Up" on 20th June 2020. The quiz started at 8 PM and ended at 8:20PM. The event was conducted through the 'Quizizz' application. The quiz contained a total of 20 questions covering the topics basic electronics and power electronics. A total of 18 students participated in the event. The quiz was exclusively for IEEE members of GCEK. Anagha N and Lavanya EV of S4 CSE bagged the first and second position respectively.



Winners of Power It Up

Riddikulus

IEEE PELS SBC GCEK conducted an idea pitching competition, RIDIKKULUS, as a part of the extravaganza "LOLLAPALOOZA". This competition was conducted in two rounds. First round involved the abstract submission on the topic Electrical power transmission system- To eradicate hazardous electrical wires that are hard to organize. In the second round, selected participants were tasked to present their innovative solutions, which was conducted on 29th August 2020 at 3:00 pm in the Google Meet platform. Due date for submitting the abstracts was on 29th August 1:00pm. This event was aimed to bring out ideas and innovations in our students. There was active participation from the students side and the event was a success. Meghana NV and Arjun Das were the coordinators of the event. Nikhila and Jishnu got the first prize, Prajul got the second and the team of Haritha and Jijina grabbed the 3rd prize.

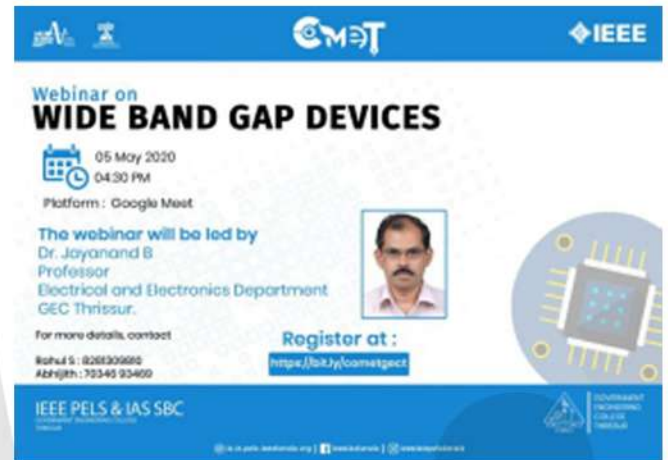


Webinar Poster

Webinar on Wide Band gap Devices

IEEE IAS & PELS SBC GEC, Thrissur on behalf of COMET, an SBC level initiative by IEEE IA/IE/PELS Jt. Chapter Kerala conducted a webinar on the topic "Wide Band Gap devices" on 5th May, 2020. The session was handled by Dr. Jayanand B, who is a Professor of Electrical and Electronics department GEC, Thrissur. The resource person pointed out the issues and limitations of present-day devices and the need for wide band gap devices. Then later he discussed the materials used for manufacturing wide band gap devices, its evolution and explained why wide band gap devices are much efficient relative to the existing devices. The webinar was followed by a question & answer session. The number of participants who attended the session went up to 80 in number.

The event turned out to be a great success with positive feedback from the participants.



Webinar Poster

Webinar on Wide Band gap Devices and the Measurement of switching Losses Using DSO

IEEE PELS SBC Government Engineering College, Thrissur conducted a webinar on the topic "Wide Band gap Devices and the Measurement of switching Losses Using DSO" on 20th April, 2020. The webinar was conducted for IEEE members and non IEEE members. The session was handled by Mr. Nitin Nigam, who is the senior application engineer in Tektronix based at Delhi. He is an expert in suggesting suitable test solutions in power electronics by doing constant analysis on emerging technologies in power electronics. The resource person pointed out the issues and limitations of present day devices and the need for wide band gap devices. Then he explained some basics of SIC and GAN

power devices. After that he explained about the characteristics, switching losses and measurement of switching losses of wideband gap devices using ISOvu probes and MSO58 (Mixed Signal Oscilloscope). The webinar was followed by a question answer session so that the participants could clear their doubts regarding the topic. The total number of registration was 38 out of which 25 of them were IEEE members

PELS Day Design Contest

IEEE PELS SBC Government Engineering College, Thrissur had organized a design contest, a design challenge for the competitive minds out there, as a part of the second annual celebrations of IEEE PELS day. The contest commenced on 24th June and ended on 10th July, 2020. The topic for the contest was to Design a Laboratory Power Supply. The competition was conducted for IEEE members and non IEEE members. Any number of teams were allowed to participate from all student branches, and attractive awards were promised to the winners. The participants were expected to design the circuit, estimate the efficiency, and to simulate the complete circuit and to do the PCB layout design. The entire work was to be compiled into the form of a report. The event saw a successful participation of 14 students from various colleges in Kerala in which 10 of them were IEEE members. The contest was welcomed with positive feedback and the SB was asked to conduct more such events in the future.



Webinar Poster

Talk on How To Plan Your Final Year Project

IAS, PELS, PES, WIE, SIGHT & CS SBC's of IEEE SB GEC, conducted a talk on the topic "HOW TO PLAN YOUR FINAL YEAR PROJECT" on 13th August, 2020. The session was handled by Arun Kumar P G, who is a Project Manager of Piller Power Systems, UK. The talk began at 2.30 pm with the importance of final year project in B.tech and the experience it gives to students as it can be considered as a stepping stone from engineering student to an engineer. The resource person then pointed out the issues in the current trend of doing a project just for the sake of academics. Then later he discussed the kind of projects to undertake and plans according to that. The talk was followed by a question answer session so that the participants could clear their doubts regard-

ing the topic. The number of participants who attended the session went up to 116. The event turned out to be a grant success with positive feedback from the participants and requests to organize similar events in the future.



Webinar Poster

Talk on Engineering and Law

IEEE IAS, PELS, PES, WIE, SIGHT & CS of IEEE SB GEC in association with department of Electrical and Electronics Engineering, GEC Thrissur, conducted a talk on the topic "ENGINEERING AND LAW" on 21th August, 2020. The session was handled by Shreeshankar Varma, Patent Attorney, AOMB IP Consultants, Netherlands. The session began with a brief on the importance of law in engineering and how it protects intellectual property.

The resource person then talked about different kinds of laws and patents with examples. Later he discussed career opportunities in the field of law for an engineer. The session winded up at 5 pm with future changes that may occur in this field internationally. The talk was followed by a question answer session so that the participants could clear their doubts regarding the topic. The number of participants who attended the session were 31. The event turned out to be a grant success with positive feedbacks from the participants and requested to organize similar events in the future.

Talk on What next after B.tech? Gate and Career Options?



Webinar Poster

IEEE IAS, PELS, PES, WIE, SIGHT & CS SBC's GEC Thrissur in association with department of Electrical and Electronics Engineering, GEC Thrissur, conducted a talk on the topic "WHAT NEXT AFTER B. TECH? GATE AND CAREER OPTIONS" on 23rd August, 2020. The session was handled by Mr. Mathew Kurian, GATE / Placement Trainer and Entrepreneur. The talk began with a brief on different paths to take after B.tech with relevance of each path described. The resource person shed light on unconventional paths to choose after B.tech to pursue as according to different students' passion. Then he pointed out the importance of GATE and its role in getting a highly reputed job in PSUs. The session winded up with discussion of challenges and opportunities that will occur after COVID 19 pandemic. The talk was followed by a question answer session so that the participants could clear their doubts regarding the topic. The number of participants who attended the session

Talk on Presentation Skills

IEEE IAS, PELS, PES, WIE, SIGHT & CS SBC's GEC Thrissur in collaboration with Kerala Engineers Association, Bengaluru, conducted a talk on the topic "PRESENTATION SKILLS" on 2nd October, 2020. The session was handled by Mr. Shinto Joseph, Director, South East Asia Operations, LDRA India. The session began with the importance of communication skills for an engineer explaining events in different ways to showcase that presentation skills and body language can make or break a career. The resource person pointed out

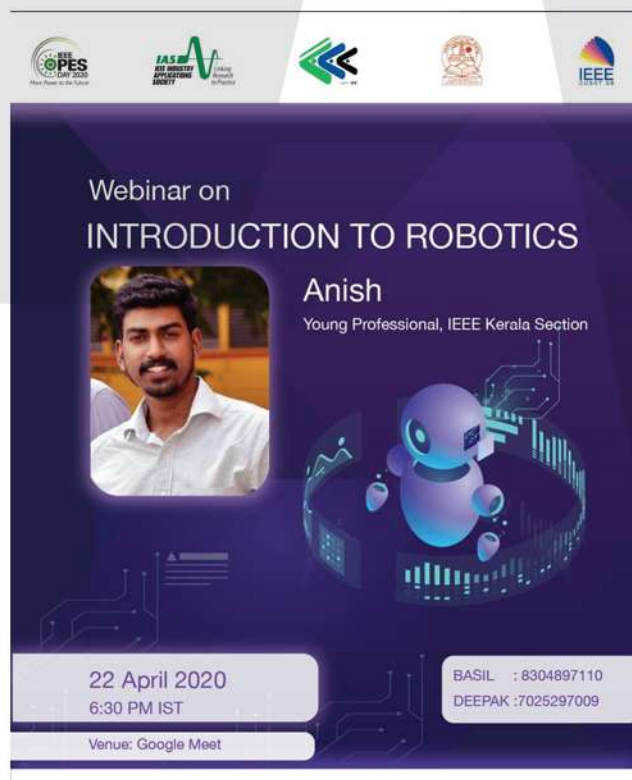
that a person's mannerisms is more important than his vocabulary. He later pointed out the importance of body language and eye contact during a presentation or interview. The session ended with discussion on online presentation and ways by which it can be improved and also pointing out common mistakes made in online interviews and presentations. The talk was followed by a question answer session so that the participants could clear their doubts regarding the topic. The number of participants who attended the session were 66.



webinar Poster

Webinar on Robotics

IEEE IAS SBC CUSAT conducted an online webinar on "Introduction to Robotics" on 22nd April, 2020. There were 50 attendees for the webinar. The session was handled by Mr. Anish M S, Young Professional, IEEE Kerala Section. The session was about the Introduction to Robotics and how we can get knowledge in the field of robotics. It was a great experience for students to listen to the experiences and share the queries with him. The session had helped students a lot in knowing more about the field of robotics and how robotics can be pursued as a career.



Webinar Poster

Webinar on Grid Energy Storage

As part of Continuous Mentoring and Educational Training, COMET, IEEE Industry Applications Society Student Branch Chapter CUSAT conducted an online webinar on "Grid Energy Storage" on 2nd May, 2020 at 6:30pm. There were 25 attendees for the webinar. The session was handled by Mr. Amit Kekare, Head of Future Grids-India and M.East Region, Siemens Ltd. The session was about Grid Energy storage and on various aspects of it. The session had helped students a lot in knowing more about the field of Energy Storage and how we can pursue a career in this field.



Webinar Poster

Project Design Competition

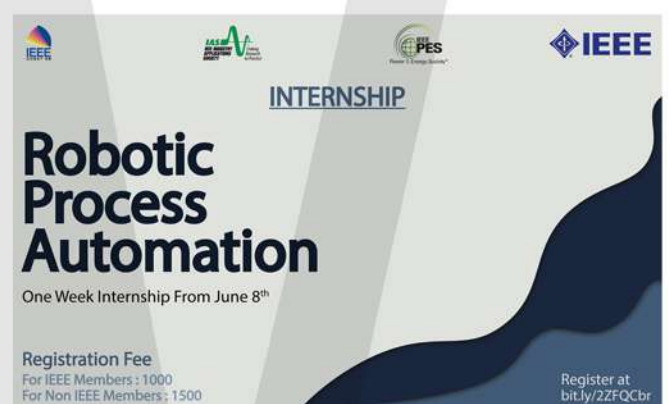
A Project Design Competition was conducted by IEEE Industry Applications Society SBC CUSAT in collaboration with IEEE Power and Energy Society SBC. The topic given was "Pandemic and Engineering". The competition was held as two levels, preliminary and finals. Many teams registered actively and brought up innovative projects. The participants were asked to submit the abstract of their project on 7th May, 2020 and a detailed report on 8th May, 2020. On 9th May, the finalists were announced. The finalists were asked to submit a video presentation of their project on 10th May, 2020. The evaluation was done by Dr. P.G Latha, Assistant Professor of Electrical Department, CUSAT. The winners were announced on May 12th.



Webinar Poster

Internship on Robotics Process Automation

A one week workshop on Robotics process Automation was conducted from 8th June, 2020 by the IEEE Industry Applications Society SBC CUSAT. The internship was handled by Karthika, from NetwrkSystems. It was a technical event and there were a total of 15 participants. It was conducted online on the zoom platform. The workshop focussed on giving the students hands-on experience of using a software with artificial intelligence (AI) and machine learning like capabilities to handle high-volume, repeatable tasks that previously require humans to perform. The attendees got an opportunity to learn a professional skill which is on high demand in the industry.



Webinar Poster

Inquest

IEEE IAS Student Branch Chapter of MACE conducted a quiz series, Inquest, from 4th April- 9th May, 2020. The quiz series was aimed to provide the participants with knowledge on various logos and taglines of companies and what they symbolized in a competitive and engaging environment. The quiz consisted of 20 questions in total for 10 minutes. The questions were based on company logos or taglines or to interpret its meaning. The quiz was conducted in 3 rounds. The first round had 35 participants of which 22 were selected to the 2nd round on the basis of average score 60. The second round of the quiz competition was conducted on 30th April, 2020. This round had 22 participants of which 10 were selected to the 3rd round on the basis of average score 60. The third and final round was held on 9th May, 2020. From the 10 participants, the title winner of INQUEST 20 was Ana's Ahammed K A (Third year electronics student), the first Runner-up was Arjun Baburaj (First year Mechanical student) and the second Runner-up was Gokul S of (Final year electrical student).



Webinar Poster

Webinar on Usage of Artificial Intelligence and Data Mining in Smart Grids

As a part of COMET, a SBC level initiative by IEEE IA/IE/PELS Jt. Chapter, Kerala, IEEE IAS SBC MACE conducted a webinar on 'Use of Artificial Intelligence and Data Mining in Smart Grids' by Dr. Surekha Deshmukh., Chair IEEE PES – IAS Chapter Pune Section, Assistant Professor at PVG's COET, SPPU, PUNE on 6th June, 2020 at 6:00 PM. The webinar had participants from various fields from students to employees. The talk gave an idea on different uses of AI and data mining and on various methods of how these technologies are applied. The resource person was also keen to address the emerging trends in the field of smart grids such as AI, machine learning and virtual reality and on the benefits of their applications in the electrical

Workshop on Pen it down - Article Writing Competition Matlab – Programming and Simulation

IEEE IAS Student Branch Chapter MACE conducted an online article writing competition inviting creative articles on the topic "Keeping social media in the age of data breaches" within a word limit of 500 words. A time period of 10 days from 21st June - 30th June, 2020 was given to the participants for submitting the articles. A total of 8 submissions were received from various students across the state out of which three were selected as the best. The writings discussed various aspects of the topic including providing valuable suggestions to keep data secure in the present age. Ashly Sibichan of St. Joseph's College of Engineering secured first place, Amitha A Nair of College of Engineering Karunagappally secured 2nd place and Bibin Biju Joshua of TKM College of Engineering secured third place.



Webinar Poster

MACE Flutter Bootcamp

IEEE IAS Student Branch Chapter MACE conducted MACE Flutter Bootcamp, a training program to equip the students with the basics of flutter framework for app development through a two months course schedule beginning from 20th July, 2020 till 20th September, 2020. The event was conducted in two phases, a beginner level course followed by a task and then an advanced level course with a task. The event had student mentors to host regular meetings to track progress of the participants throughout the course period. The training session was fruitful for students who followed the course structure and tracked their progress from time to time to learn the framework of flutter for app development from installation to making easy apps.



Webinar Poster

Webinar on Keeping your Best Foot Forward to Keep the Learning Curve

IEEE Industry Applications Society Student Branch Chapter MACE conducted a webinar on 27th July 2020 from 4:00 PM to 5:00 PM (IST). Webinar was on the topic 'Put your best foot forward to keep the learning curve rising' by Mr. Sumith Chhabria, Electronics System Engineer at Multicorpos LLC, USA. IEEE IAS YP Chair and IAS CMD Students, YP and WIE Event Committee Chair. The event gave the audience an insight about higher studies in the US along with research benefits. The resource person shared his experiences to the audience on how to approach a mentor in a professional career. The event also briefed about the benefits of being an IEEE Volunteer and an IAS YP member and on some of the CMD Contests too. The event did provide a sense of motivation to participate in competitions and to involve in doing projects and acquiring new skills. The participant count for the event was 41. The event was open for all.

Sell Me this Pen

IEEE Industry Applications Society of IEEE MACE SB in association with IEEE MACE Computer Society conducted an event called Sell Me This Pen. The event was conducted in two phases. First Phase is a quiz competition held on 28th August, 2020. And the Second



Workshop Poster

Phase was a live presentation held on 30th August, 2020 from 4:00 PM to 5:30 PM (IST). The participant count for the First Phase was 11, out of which 9 were selected for the second phase, which was a live presentation. Cristo S Kayyalakam, who runs a business firm, Dynamic Control System, Authorised channel partner of Mitsubishi Electric and Kevin Jhony Joseph, Project Engineer at SR electric company, Abudhabi were the judges of the event. Meghna Manoj Nair of VIT Chennai occupied the first position. The second and third prizes were bagged by Yedhu Babu and Merin Mary Josy of Mar Athanasius College of Engineering.



Webinar Poster

Surge – Idea Pitching Competition

The IEEE Industry Applications Society and Power and Energy Society SBC's of MEC jointly organized an online idea pitching competition named 'SURGE' from 26th March to 3rd April 2020. Participants were asked to submit a document containing the idea on the topic 'Sustainable Engineering Projects for humanity'. 16 teams from different engineering colleges across India participated in the competition. The team MEC_ELECTROS were the winners of the event. Anjana Jayan, Akshaya P, Anjana Anil were the members of this team and their project idea was "Sevak-IoT based underground drainage worker safety system". The selection criteria were based on the aspects of benefits to humanity, innovative thinking and feasibility of the project. The winners were awarded a cash prize of Rs.750.



Webinar Poster

Webinar on Blockchain Post Covid-19

The Industry Applications Society of IEEE MEC SB successfully conducted a webinar on the topic 'Blockchain Post Covid-19' on 20th June, 2020 as part of COMET - Continuous Mentoring and Educational Training by IEEE IA/IE/PELS Jt. Chapter Kerala. The session was handled by Mr. Sreeraj S, who is the Director of Blockchain Labs at NetObjex, a software company based in Trivandrum. The webinar saw a participation of 66 students and professionals from many colleges across Kerala. The talk started with the introduction to Blockchain technology and its importance. Later he spoke about the scope of Blockchain technology post the Covid-19 era. Participants were also given the opportunity to interact with the speaker after the session. The session was conducted on

Google Meet. The participants were given e-certificates for their participation and a certificate of appreciation was also given to the speaker.



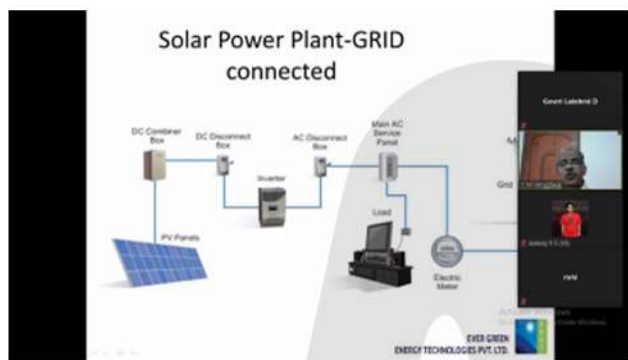
Webinar Poster

Focus - Online Technical Article Writing Competition

IEEE Industry Applications Society and Power and Energy Society SBC's of MEC organized an online technical article writing competition named 'FOCUS' from 23rd July to 3rd August 2020. Participants were asked to submit an article based on any of the four topics- Electric Vehicles, Distributed Energy Resources, Biomedical Signal Processing, Medical Virtual Reality. 20 participants from different engineering colleges across Kerala participated in the competition. Winners from the electrical and biomedical domain were chosen. Jairam R. Prabhu from Model Engineering College and Anson Mathew from College of Engineering Chengannur were the winners of the event.

Insight

IEEE Industry Applications Society and Power and Energy Society SBC's of MEC jointly organized a two-day webinar 'IN-SIGHT' on 26th and 27th September 2020. The webinar on the topic 'Introduction to Smart Grids' was organized in collaboration with IEEE IAS MEC SBC, IEEE PES Kerala Chapter and IEEE PES Young Professionals Kerala. The first webinar session was conducted by Ms. Haritha G, Ph.D. Research Scholar at NIT Calicut. She explained the latest technologies in the smart grid implementation, its benefits as well as its applications. It was conducted on Google meet. The webinar provided a basic knowledge on the topic and was very informative. 60 participants from different engineering colleges across Kerala participated in this session. The webinar on the topic 'Basics of Solar Power System' was organized in collaboration with IEEE IAS MEC SBC and IEEE PES Kerala Chapter. The webinar was taken by Dr. Varghese C.M, CEO Ever Green Energy Technologies Pvt. Ltd, Cochin. He explained the importance of energy efficiency, basics and design of solar photovoltaic systems, energy storage technologies etc. 55 participants from different engineering colleges across Kerala participated in this session.



Workshop Content

Webinar on Basics of Electrical Vehicle

IEEE IAS and PES SBC of GEC Palakkad organized a webinar on basics of electric vehicles on 9th April, 2020. The webinar was convened by Mr. K S Saran, PES Young Professional Volunteer, IEEE Kerala Section. The speaker emphasized the Introduction of Electric vehicles, what's inside it, different types, and charging of electric vehicles. He also pointed out what to look out in the future. The session was very interactive with enthusiastic registrants which include an International one who was from Colombia. It was very noticeable that the event received a lot of good reviews at the end of the session. Total number of participants was 51.



Webinar Poster

Fix it Up

IEEE IAS SBC GEC Palakkad initiated an online contest, 'FIX IT UP'. This contest focused on showcasing the talents of mini engineers by repairing anything under the sky. The event was coordinated by Ms. Shahina Salim, Treasurer of IAS SB Chapter, GEC Palakkad and by Ms. Geethu P, Vice Chairperson of IAS SB Chapter, GEC Palakkad. All the participants are instructed to send their respective videos or photos of their repair work on or before 25th April 2020. The repair work should be related to electrical or electronics equipment. Each and every photo/video received had unique ideas and methods of repairing that shine their own.

Virtual Internship 2020

The Virtual Internship 2020 was an engaging initiative with the association of PACE LAB and IEEE IAS SBC GEC Palakkad. The online session was conducted exclusively for GEC Palakkad students. The intention of this Online Internship Programme was to impart practical knowledge in a specific topic rather than a general understanding and also to provide a physical hands – on session. PACE LAB collaborated with Institution of Engineering and Technology (IET) and CETChapter coordinated this virtual internship programme. This programme was conducted as per the KTU requirements and AICTE guidelines. The students attained two certificates from PACE LAB and IEEE SB GEC Palakkad at the completion of the course. Each internship course was of approximately 20 hours which included pre – recorded video sessions, work -from-home

assignments, live interaction and assignment test for practice. Although the certification was for one week, the students were given an extended period of time in order to complete the course at their convenience. Students were provided with the course material, software tools and authentic certificates (e copy).



Virtual Poster

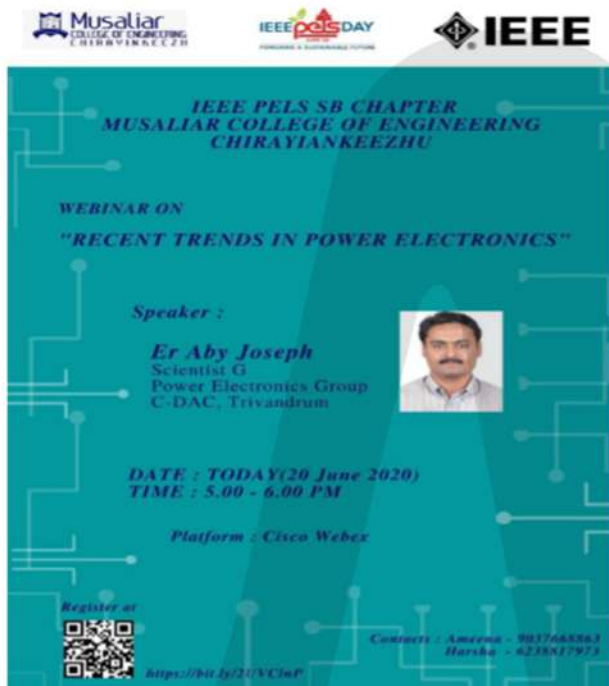
Webinar on Decoupled Control of Multi-Machine Multi-phase Drives Using a Single Inverter

IEEE Industry Applications Society of IEEE SB CET conducted a webinar on the topic Decoupled Control of Multi-Machine Multi-phase Drives Using a Single Inverter on 8th June, 2020 from 5:30 to 6:30 pm IST. The webinar was handled by Dr. R Sudharshan Karthik, Assistant Professor in the Department of Avionics, Indian Institute of Space Science and Tech-

hnology, Thiruvananthapuram, India. A total of 105 students and faculties from different institutions across India registered for the program out of which 42 turned up for the session. The session was very informative and gave a good insight into the topic. There was a Q&A session after the presentation in which a wide array of questions was asked and the speaker cleared all the doubts. The participants were given a feedback form.

Webinar on Recent Trends in Power Electronics

IEEE PELS Student Branch Chapter of Musaliar College of Engineering, Chirayinkeezhu organized a webinar on the topic "RECENT TRENDS IN POWER ELECTRONICS" on 20th June 2020 from 5.00 pm to 6.30 pm, as part of Power Electronics Day 2020 celebration. The session was handled by Er. Aby Joseph, Scientist G, Power Electronics Group, C-DAC, Trivandrum. Er Aby Joseph presented various topics in power electronics which is very useful. It's a great opportunity for the rising engineers. He started with the introduction of power electronics and he continued with various topics such as development and application of power electronics. Total 78 participants joined the webinar and a good feedback was received.



Virtual Poster

Webinar on Career Options and Opportunities for Electronics Engineering Graduates

IEEE IAS Student Branch Chapter and WIE Affinity in Association with Department of Electronics and Communication Engineering, Musaliar College of Engineering jointly organized a webinar on the topic "Career Options and Opportunities for Electronics Engineering Graduates" on 27th July, 2020 from 06:00pm to 08:00pm. The session was handled by Mr. Renjith C V. The session gave an overview of the challenges, tricks to excel in interviews and stressed on various job opportunities. Total 123 Participants joined the Webinar and good feedback was received.

A Webinar on Significance of Grid Connected PV in Current Scenario

A webinar on the topic 'Significance of Grid connected PV in current scenario' was hosted by the IEEE Industry Applications Society SBC ASIET, on 12th of May, 2020 as a part of COMET, a SBC level initiative by IEEE IA/IE/PELS Jt. Chapter Kerala. The webinar was headed by Ms. Nayana J, Assistant Professor, EEE Department, ASIET. The session began with an introduction to renewable resources of energy, the current energy crisis in the world and how PV Grid will help in changing the current energy scenario for a better one. The speaker also efficiently explained the different tools and techniques used in the production of a grid and how the PV Grid is used in different fields. The webinar also paved out to be an interactive session where the students raised various questions about the topic. A feedback session where the students gave their views on various aspects of the session was also conducted.



Webinar Poster

Trash2Treasure



Webinar Poster

Trash2Treasure, a 60-sec video challenge was conducted by the IEEE Industry Applications Society Student Branch Chapter, ASIET from 5th June - 20th June, 2020 in accordance with the World Environment Day, through an online platform. It required the participants to submit a 60 second video showcasing their skills and creativity to make an innovative and useful product by reusing any waste materials present in their surroundings. The judges for the event were Ms. Nayana J, Chapter Advisor, Industry Applications Society, IEEE SB ASIET and Mr. Vignesh Haridas, Chairman, Industry Applications Society, IEEE SB ASIET. The event was an Environment day initiative by the SB Chapter to try and encourage the habit of reusing waste materials to make something useful out of it thereby abiding to the 3R principle of Reduce, Reuse and Recycle. The videos submitted varied from products made from daily household products to creative new products made by making minor tweaks in existing non-functioning electronics.

The competition ensured that the participants were able to explore their creativity as well as convey their ideas thereby learning about the new and emerging technologies in various fields for the healthy and efficient usage of reusable products around us.

Webinar on Electrical System Design Engineer & Project Execution

A webinar on the topic Electrical System Design Engineer & Project Execution was hosted by the IEEE Industry Applications Society Student Branch Chapter, ASIET in association with the Power & Energy Society Chapter of IEEE Student Branch, ASIET and the Department of Electrical and Electronics Engineering, ASIET on 5th of July, 2020 from 4.00 PM to 5.00 PM, through an online platform. The webinar was handled by Mr. Sajith G R, Senior Manager, ULCCS Ltd. The session began with an introduction about the Power system utility and its requirement in the industries. He then spoke about breaker capacity and how both GFC & AMF differed and how they are used in various industries. The speaker also efficiently explained the importance of an electrical system design engineer and their role in completion of projects. The participants were also shown a glimpse into what MCB, ELCB, MCCB is and how they are designed to work efficiently in the appropriate situations and why Building Integrated Modelling (BIM) along with renewable sources of energy would be important to meet the ever-increasing energy needs. The webinar also paved

out to be an interactive session where the students raised various questions about the topic. A feedback session where the students gave their views on various aspects of the session was also conducted.

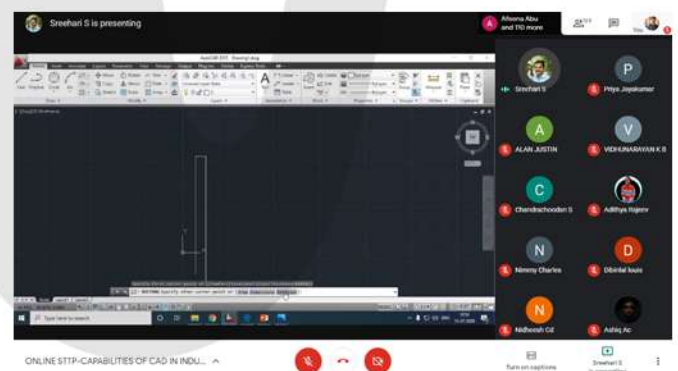


Webinar Poster

Capabilities Of CAD In Industrial Electrical Drawings

A Short-Term Training Program (STTP) on the topic "Capabilities of CAD in Industrial Electrical Drawings" was hosted by the IEEE Industry Applications Society Chapter of IEEE Student Branch, ASIET in association with the Power & Energy Society Chapter of IEEE Student Branch, ASIET and the Department of Electrical and Electronics Engineering, ASIET on 12th of July, 2020 from 10.30 AM to 12.30 PM, through an online platform. The training program was handled by Mr. Mohammad Aashiq, Solution Engineer, KKM Soft, Chennai and Mr. Sreehari S, Assistant Professor, Department of EEE, ASIET. The session began with Mr. Sreehari, introducing the AutoCAD software to the participants. He then gave a glimpse into all the basic functions and tools used in the software to draw electrical drawings such as arrays and mirrors. He also explained the various toolbars which are available along with pallets in them which had many diverse functions. The next session was handled by Mr. Mohammad Aashiq S, who is an authorized AutoCAD partner. He explained to the participants the advanced software used for electrical drawings known as AutoCAD Revit and then demonstrated the use of all functions necessary in the drawing of an electrical wiring system for large scale buildings or complexes using several functions available in Revit with examples of wiring plans of a building and an example of making a new electrical wiring system for a small building. By the end of the session, the attendees acquired the knowledge about the capabilities of CAD in industrial electrical drawings, their uses across the fields of science and how it is beneficial to society. A feedback session where the students gave their views on

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Workshop Screenshot

Faculty Development Program (FDP) on Real time application of Power Electronics

A National level 5-day Faculty Development Program (FDP) on the topic "Real time application of Power Electronics – Scope and Challenges" was hosted by the Industry Applications Society Chapter of IEEE Student Branch, ASIET in association with the Power & Energy Society Chapter of IEEE Student Branch, ASIET and the Department of Electrical and Electronics Engineering, ASIET from 27th of July – 31st July, 2020 from 1.30 PM to 3.00 PM, through an online platform. The Program was coordinated by Ms. Deepa Sankar, Associate professor, EEE Dept and Ms. Nayana J, IAS Chapter Advisor, IAS SBC, IEEE SB ASIET. The program was inaugurated by Dr, V Suresh Kumar, Principal, ASIET. The Program kick started with a vibrant session on "Recent advancement in electric vehicles and its charging Infrastructure" by Dr. V Karthikeyan, Assistant Professor, National Institute of Technology, Calicut and the session covered the basics of electric vehicles and the importance of power electronics in the new area. On the second day, the session was handled by Dr. Shreelakshmy MP, Assistant Professor National Institute of Technology, Calicut. She explained in detail the topic "Recent trends in electric drive systems for electric vehicles" and the session covered the im-

portance of the area power electronics, the last day shared the most vital information regarding real time implementation using FPGA. The session was handled by Dr. Dinesh Gopinath, Associate Professor, College of Engineering, Trivandrum. A feedback session where the participants gave their views on various aspects of the session was also conducted at the end of each session.

NEP
ASIET
Adi Shankara
INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electrical & Electronics Engineering

Five Day Online
Faculty Development
Program :

27th – 31st
July, 2020 1:30 – 3:00 PM
(IST)

Platform: Google Meet

**Real time Applications of
Power Electronics-Research
Scope & Challenges**

Speaker 1
Dr. V Karthikeyan
National Institute of Technology,
Calicut

Speaker 2
Dr. Shreelakshmy MP
National Institute of Technology,
Calicut

Speaker 3
Dr. Shales Sathyan
National Institute of Technology,
Vellore

Speaker 4
Dr. Vijayakumari A
Amrita Vishwa Vidyapeetham,
Coimbatore

Speaker 5
Dr. Dinesh Gopinath
College of Engineering,
Trivandrum

Register
Now
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Registration fee:
Rs. 100 For Students / Research scholars.
Rs. 150 For Faculty / Scientist.
Rs. 250 For Industrialist.

Coordinators:
Deepa Sankar : 9447293774
Nayana J : 9447055893,
9633030157

PES IAS IEEE

Virtual Poster



Virtual Poster

Webinar on Experiences on Practical Engineering

A webinar on the topic 'Experiences on Practical Engineering' was hosted by the Industry Applications Society of IEEE Student Branch, ASIET, on 1st of August, 2020 from 7.00 PM to 8.30 PM through an online platform. The webinar was headed by Mr. Abhinav Rajeev, Activity Coordinator of IEEE PES YP Kerala, Kochi Subsection. The session began with a brief talk of how passion driven knowledge would help anyone to execute their ideas into a working model and how by working on each one of his projects he learnt something new from each success and failure he had. The speaker also explained how he kept his product budget in check by spending the money on working reusable parts whenever possible rather than buying new materials thereby also reducing the risk of a huge loss while trying to work a new product out.

. The speaker made sure the session was an interesting one by discussing every bit of information with a project/product he designed and executed. The webinar paved out to be an interactive session where the students raised various questions about the topic. By the end of the session, the attendees acquired the knowledge about how significant it is for one to put in practice the knowledge we gain through academics and how it should be made beneficial to the society. A feedback session where the students gave their views on various aspects of the session was also conducted.

Membership Development session

A Membership Development session was hosted by the Industry Applications Society of IEEE Student Branch, ASIET, on 3rd of September, 2020 from 7.00 PM to 8.00 PM as a part of NOVUS 3.0, a SB initiative of IEEE Student Branch, ASIET. The session was headed by Mr. Vignesh Haridas, Chairman, IEEE IAS SBC ASIET. The session began with an introduction to Industry Applications Society and its vision & missions as a transnational organization. The speaker then spoke about the various benefits that is provided by the IAS chapter to its members and also shared with the attendees his experience as an active member of the chapter. He also effi

efficiently explained the prestigious awards and travel programs that both the SB chapter and its members can avail with a detailed explanation on how, when and where to avail the same. The session also had a "Know Your Student Branch Chapter" section where the attendees were given a glimpse into the events conducted by the chapter and the team behind the IEEE IAS SBC ASIET. The session paved out to be an interactive session where the students raised various questions about the SBC. The session also emphasized on the future plans of the chapter and by the end of the session, the attendees gained various insights and reasons to be a part of the IAS chapter.

Aurient

AURIENT, an audio challenge was hosted by the Industry Applications Society of IEEE Student Branch, ASIET, from 3rd of September to 4th of September, 2020 as a part of NOVUS 3.0, a SB initiative of IEEE Student Branch, ASIET. The judges for the event were Ms. Nayana J, Chapter Advisor, Industry Applications Society, IEEE SB ASIET and Mr. Vignesh Haridas, Chairman, Industry Applications Society, IEEE SB ASIET. The event required the participants to submit a recorded audio showcasing their knowledge about the IEEE Industry Applications Society Chapter using the resources given in the student branch website as well as the information they

gained by attending the Membership Development session conducted on the 3rd of September, 2020. The event was an initiative by the SB Chapter to encourage the student members to have a clear cut knowledge about the various benefits, prestigious awards and travel programs that both the SB chapter and its members are provided with by the Industry Applications Society Chapter. The competition ensured that the participants were able to exhibit their speaking and presentation skills by sharing knowledge about the chapter and also paved out to be a stage for the participants to share their views, suggestions and ideas to improve the chapter. A feedback session where the participants gave their views on various aspects of the competition was also conducted.



Virtual Poster

Webinar on the topic Unraveling House Wiring

A webinar on the topic 'Unraveling House Wiring' was hosted by the Industry Applications Society of IEEE Student Branch, ASIET, on 20th of September, 2020 from 7.00 PM to 8.30 PM through an online platform. The webinar was headed by Mr. Abhinav Rajeev, Activity Coordinator of IEEE PES YP Kerala, Kochi Subsection. The session began with a brief interaction with the attendees about their knowledge regarding the wiring and switches in their home and surroundings thereby introducing the different types of wires and wiring systems. The speaker moved through his interesting interactive session by sharing a few of his experiences and encounters, as he also enlightened the attendees with a live demonstration of distribution boxes and various switches soon after he had efficiently explained various wiring layouts and protection devices used in our homes and other buildings along which he also proved to the participants how a BLDC fan was more efficient than a normal or ordinary fan. The attendees were also given a glimpse into the electricity bill calculation and the costing and estimation of wiring. The webinar paved out to be an interactive session where the students raised various questions about the topic. The webinar also emphasized on how the future is going to be

driven by a healthy energy management and by the end of the session, the attendees acquired knowledge about the different wiring systems and the methods in which electricity bills are calculated across industries and domestic households. A feedback session where the students gave their views on various aspects of the session was also conducted.



Screenshot of Webinar

Virtual Distinguished Lecture Program

A virtual distinguished lecture program was conducted by IEEE IAS SBC JCET in association with Council of RFID on 16th June, 2020. The program was on the topic, Zero Power RFID Enabled Wireless Ultrabroadband Modules for IoT, SmartTag and Smart Cities Applications. The program was headed by Prof. Manos M Tentzeris. The program provided a briefing on the significance of RFID and its applications. Participants interacted with the speaker actively and cleared their doubts. A positive feedback was received from the participants.



Workshop Session

Webinar on Bridgeless Power Factor Correction Circuits

IEEE Industry Applications Society Student Branch Chapter, College of Engineering Chengannur conducted an online webinar on bridgeless Power Factor Corrections Circuits. The webinar was handled by Dr. Tanya Gachovska, IEEE IAS PEDCC Chair, PELS Ottawa Co-Chair, who was an established personnel with an enormous record of experience in the field of applied power electronics. The workshop was held on 31st May 2020. The Speaker covered up the basic portions of Power Bridge circuits. All electronics enthusiasts were provided a chance to maneuver deep into the fascinating realm of power electronics. The presentation was followed by an interactive session where the students were given an opportunity to clear their doubts

Webinar on VLSI Design

As part of science day, IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur conducted an online webinar about VLSI Design with Verilog HDL on 28th February from 1:00PM to 4:00PM at Seminar hall. Forty-one students mainly from third and fourth year attended the same. The webinar was taken by Maven silicon company, Bangalore. It was a very informative session. Verilog is basically a Hardware Description Language. They taught how Verilog can be used in VLSI designs by using different logic gates and programs. The event was mainly focused on circuit designing, project buildup and chip designing. And they indeed discussed various future opportunities in the field where the students could approach. Students listened to the webinar with great enthusiasm and they are sure to have gained an in-depth knowledge regarding VLSI designs and Verilog programming. After the webinar a feedback session was arranged where the students shared how much they benefited from attending the webinar and expressed their gratitude towards the coordinating committee for organizing the same.



Webinar Session

Webinar on Home Automation

IEEE Industry Applications Society Student Branch Chapter, College of Engineering Chengannur conducted a technical webinar on Home Automation on 28th May 2020. The webinar was handled by Mr. Shahim Baker, Chair Industry relations IEEE Kerala Section and CEO, Baker Grey who was an established personnel with an enormous experience in the field of Home Automation. It was scheduled at 7:00 PM and Google Meet was chosen as the platform. Automation technology is bringing the gap between man and machine. Since the session was handled by the dynamic industrialist, the students got full exposure in the field of Internet of Things. He guided the students through various technologies that define the novel field of interest. The presentation was followed by an interactive session where the students were given an opportunity to clear their doubts from the resource person. The feedback form was also released later on the same day.

Webinar on Introduction to Computer Vision

IEEE Industry Applications Society Student Branch Chapter, College of Engineering Chengannur conducted a specialized webinar on Introduction to Computer Vision on 12th July, 2020. The webinar was handled by Usha Rengaraju, an expert Principal Data Scientist Organizer of Tensor Flow User Group Mysore and GDG Mysore. The usage of Machine Learning using Tensorflow, Computer vision using Google Collab where the areas covered up by the speaker. The session was really a hands on workshop for the students. Live classes encourage the students to work and get familiarise with computer vision. She shared her repository files in the github for students to get an idea about Computer vision. The presentation was followed by an interactive session where the students were given an opportunity to clear their doubts from the resource person. The feedback form was also released later on the same day.

Distinguished Lecturer Program on Challenges of Young Professionals in Industry 4.0

IEEE Industry Applications Society Student Branch Chapter College of Engineering Chengannur in collaboration with IEEE PELS/IAS Student Branch Chapters of Federal University of Campi-

vna Grande (UFCG) and Federal University of Paraíba (UFPB) coordinated a Distinguished Lecturer Program on Challenges of Young Professionals in Industry 4.0. The session was handled by Lucia Pia Torres, Project Coordinator at Sinergeia, from South Argentina, Region 9. The DLP was held on 30th July, 2020. The session mainly covered the problems of young people who are searching for their first job opportunities having no clear information about the qualities sought in the available profiles. The presentation was followed by an interactive session where the students, young professionals were given an opportunity to clear their doubts and get an idea about their passion from the resource person. The feedback form was also released later on the same day.

PCB Design Workshop

A PCB design workshop was conducted by IEEE IAS and RAS SBC's of RIT on 14th June, 2020. The workshop was handled by Akshay C- Vice chair IEEE SB RIT, Technical Coordinator PES Kerala Chapter. The session included the explanation of PCB designing techniques and its significance in electronics. A total of 35 participants attended the workshop. An interactive session was held after the workshop which helped the students to attain more deeper knowledge on the topic as well as a chance to clear their doubts. The feedback received was encouraging and positive.



Virtual Poster

Workshop on Arduino

A 2 day workshop on arduino was conducted by IEEE IAS SBC RIT on 10th and 11th June, 2020. The workshop was handled by Akshay C - Vice chair IEEE SB RIT, Technical Coordinator PES Kerala Chapter and Nithin V M - Chair IEEE IAS SBC RIT, Student Representative IEEE PES Kerala Chapter. The workshop helped the students to gain practical experience on how to work on an arduino and how it is implemented in various tasks and projects. The workshop was interactive and students actively participated throughout the workshop. A very positive feedback was received from the participants pointing to the effectiveness and insightness perceived from the workshop.



Virtual Poster

Extempore Speech Competition

The speech competition was conducted in association with IEEE SB VJEC. The program began by 4:10 pm at Varikattu hall. There were about 20 participants from different departments. Each one was given a topic to present for 2 minutes. The judge was Ms. Lipina Gopal. The coordinators organized the event smoothly and were well cooperated by participants. The competition came to an end by 5:00 pm. The winners were Nasif (S6 EEE) who bagged the first position and Kiran S (S6EEE) and Junaid Ahmed (S4 EEE) bagged the second place.

Bright - Talk Design of Power Plants

IEEE PELS SBC VJEC Organized a webinar on the topic "DESIGN OF SOLAR POWER PLANTS". The webinar was conducted on 19th April 2020 at 7:00 PM through Google Hangouts. The webinar was presented by E R AJITH GOPI (Head of Technical Consultancy in solar PV projects at ANERT and, IEEE PES Vice

Chair Kerala Section). The webinar lasted for 2 hours. The participants attained knowledge about the design strategies of solar power plants and the importance of solar energy in future. There were about 45 participants in the webinar. The coordinators organized the events smoothly and were well cooperated by the participants.



Virtual Poster



Virtual Poster

Online Quiz

As a part of IEEE PELS DAY celebration, the IEEE PELS SBC VJEC organized a 3-day online quiz based on the topic "History of Electronics" from 28th June 2020 to 30th June 2020. The quiz runs from 8.30pm-8.45pm each day. There were about 33 participants. The quiz carries 20 questions per day and the highest average decides the winner.

Winners were Anandapadmanabhan M, V V Pooja Raj.



Virtual Poster

Exousia- High Efficiency Wireless Power Transfer System

IEEE PELS SBC VJEC Organized a webinar on the topic "HIGH EFFICIENCY WIRELESS POWER TRANSFER SYSTEM".

The webinar was conducted on 12th AUGUST 2020 at 8:00 PM through Google meet. The webinar was presented by Dr. Huang-jen chiu (Dept. Electronics and computer engineering director, Center for power electronic technologies Dean, office of industry-academia collaboration National Taiwan university of science and technology) and Dr. Yu-Chen (Steven) Liu (professor Department of electrical engineering National Ilan University Taiwan). The webinar lasted for 1 hour. The participants attained knowledge about wireless power transfer systems and its characteristics. There were about 130 participants in the webinar. The coordinators organized the event smoothly and were well cooperated by the participants.



Virtual Poster

Talk on IEEE Collabratec

A talk session was conducted by the IEEE Industry Applications Society Student Branch Chapter RSET on 24th August, 2020 in Google meet platform. The session was handled by Ms. Sona N Thadevus, Content Manager, IEEE PIE (Promotion of Innovation and Entrepreneurship) Kerala Section. Around 50 participants had attended the talk. This event was conducted in lieu of Snag The Insignia. The main aim of the session was to introduce the IEEE collabratec platform to the students and how to gain badges in it. Detailed explanations about different services available in the IEEE collabratec platform were given to the student members. It was a 1-hour talk session that was successfully completed and the participants got comfortable with the platform. On the completion of the session, the participants were able to grasp the idea of the IEEE collabratec platform.



Virtual Poster

Technocrat 2.0

An online quiz competition TECHNOCRAT 2.0 was conducted by IEEE Industry Applications Society Student Branch Chapter RSET on 29th August, 2020. Students from different departments of the college attended the event. Pictures related to science and technology along with clues were given as questions. A total of 10 questions was given and it should be completed within 10mins. Points were given on a time basis. We got a great response from the students. The winner of the competition was Anjana M, S3 ECE Alpha.



Virtual Poster

Technical Quiz

An online technical quiz competition was conducted by IEEE Industry Applications Society Student Branch Chapter RSET as a part of Comet Phase 2 on 21st September. Students from different departments of the college attended the event. Questions related to Embedded System, General Technology, and IAS Chapter Benefits were given. The quiz was conducted in Google Meet. A total of 40 questions were given. Points were given on a time basis. The technical quiz was conducted in three rounds. Selected students from each round were allowed to take part in the next round. The winners of this competition are given the opportunity to represent the college in the final Phase of COMET.



Virtual Poster

Placement talk 2020

An online talk, the first among many, was conducted by IEEE Industry Applications Society Student Branch Chapter RSET on 27th September, 2020 in the Google meet platform. The session was handled by Ms. Pooja Vinod, B.Tech Computer Science and Engineering University Topper (APJ Abdul Kalam Technological University) 2020 Batch. The talk had about 75 active participants throughout the session. The talk mainly concerned expertise in the art of appearing for an interview and also its preparation. Detailed explanations of Aptitude exams, Coding Preparation, Technical interviews, and HR Interview were shared. It was a 1-hour interactive session that was successfully completed. On completion of the talk, the participants got a general view of how to approach future various obstacles ahead of them.

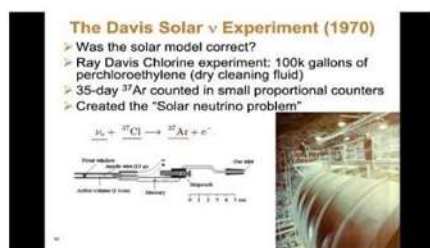


Virtual Poster

Distinguished Lecture on Neutrinos - A Personal Journey

IEEE Student Branch College of Engineering Karunagappally under the NPSS PELS Jt. chapter organised a distinguished lecture handled by Mr Richard Kouzes, Laboratory Fellow, Pacific Northwest National Laboratory, department of energy, United States of America. The Webinar was scheduled on 23rd of April 2020.

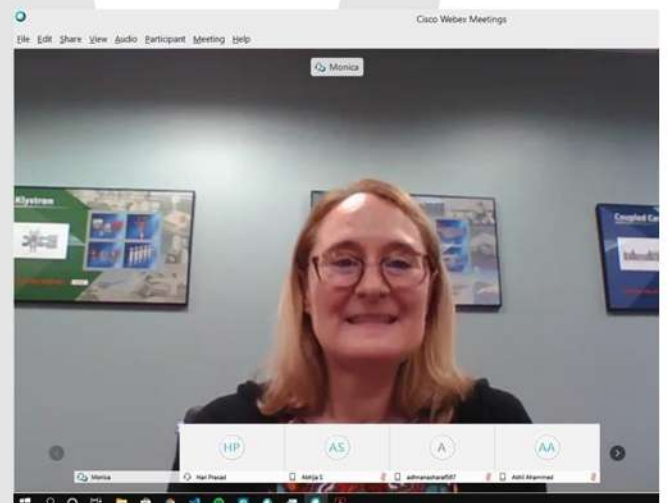
The one-hour session was attended by 39+ students from all over Kerala. Instead of a one-way communication Mr Kouzes turned the distinguished lecture more interactive. The topic of discussion was "Neutrinos – a personal journey". Mr Kouzes along with the topic made a good impact in letting the students join the webinar. We arranged a platform for the students to drop their feedbacks which were quite satisfactory



Screenshot of event

Distinguished lecture on High Power and High Frequency Gyrotrons

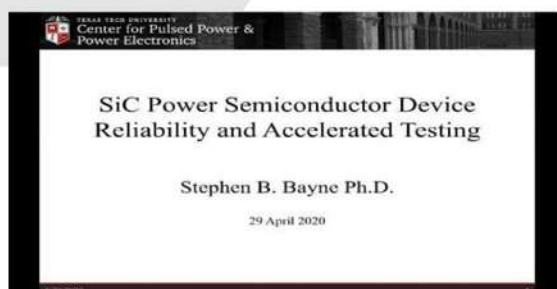
NPSS PELS Jt chapter of IEEE Student Branch College of Engineering Karunagappally successfully initiated a webinar on 27th of April 2020. The distinguished lecture was handled by Dr Monica Blank, Senior Scientist, Communication and Power Industries, United States of America. We received 39+ registration for the DL. The one-hour session discussed about "High Power and High Frequency Gyrotrons". Enthusiastic students raised their opinion and doubts which gave them a well-defined perspective about the topic. In the limited time she managed to cover all the must-know realities and facts relating the topic. To improve the quality of our event we requested students for their feedback which were pretty useful.



Screenshot of event

Distinguished Lecture on Semiconductor Devices for Pulsed Power and High Voltage applications

IEEE Student Branch College of Engineering Karunagappally under NPSS/PELS Jt chapter initiated a DL on 29th of April 2020. The speaker of the day was Dr Stephen Bayne, Professor, Electrical and Computer Engineering, Texas Tech University, USA. Around 50+ students participated for the same. The topic of discussion was "Semiconductor Devices for Pulsed Power and High Voltage applications". The topic was relevant and apt one in educating the student community. At the end of talk, students raised their viewpoint and made the students think out of the box. We received satisfactory response from the participants and was requested for more of such initiatives.



Screenshot of event

Distinguished Lecture on Introduction to programming with CUDA.

IEEE Student Branch College of Engineering Karunagappally under the initiative of NPSS PELS Jt chapter organised a webinar on 19th of May 2020. The DL started by welcoming the lecturer Mr Martin Purschke, Senior Physicist, Brookhaven National Laboratory, New York. The session comprised of 60+ students from different field of studies. The topic of discussion was "Introduction to programming with CUDA". Mr Purschke managed to present his content with simplicity which itself pushed the students to stay till the very end of his talk. His humorous approach in teaching made the students feel free to interact with him to clarify their doubts about the matter. Within the scheduled time he did cover the fundamentals and the must-know technicalities of the topic. We arranged feedback session for the students which were satisfying.



Screenshot of event

IEEE Day 2020

IEEE Student Branch college of Engineering Karunagappally as part of the IEEE Day, conducted 2 online competitions namely, VolEx and MazeRun.

VolEx(Volunteering Experience), conducted on 11th October,2020 at 7:00 pm, was aimed as an introspective session for the individuals, to go back in time and reflect their entire journey of IEEE experiences and further sharing their expectations, challenges and hesitations; all that they had been through in IEEE. In a word limit of 60 words, the volunteers quite explicitly resonated their heart-felt emotions and inspired the readers for further encouragement.

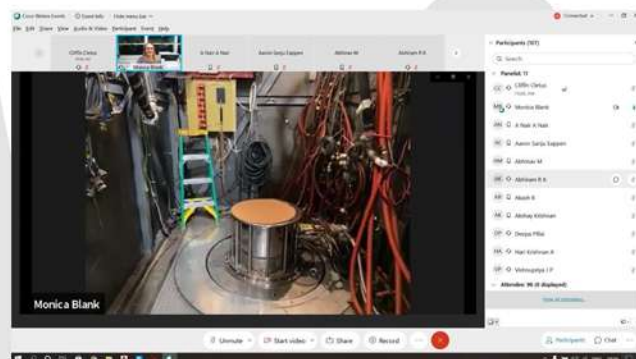
MazeRun, was a Technical Crossword it was held on 10th October, 2020 at 7:30 pm-8:00 pm. The technical puzzle game was worthwhile for all the appealing attendees. It was pretty much helpful in bringing our idle brains back to some dynamic work. Moreover, it enabled to brush up our technical knowledge too. The realms enclosed every aspect of the technical world be it related to coding, renewable energy, sustainability, bitcoins etc and was quite an unleashing challenge.

Both the contests were conducted via online mode through google forms, lots of diligent participants shared their fabulous experiences & challenges they faced as a volunteer. It was a fabulous idea, anyway we also had so much to learn from their variant experiences

There were 64 attendees for VolEx who put down their valuable experiences. And 70 attended MazeRun to try out their brain power.

The winners were determined by the judging panel after evaluations. Certificates were provided for the victors.

Virtual Industrial Visit to Communications & Power Industries (CPI)



Screenshot of event

IEEE Student Branch COLLEGE OF ENGINEERING KARUNAGAPALLY in association with NPSS/PELS JT Chapter conducted a virtual IV on Communications and Power Industries on 6th December 2020 at 7:00PM. The duration of the plenary was about 2 hrs. The session was handled by Monica Blank, Senior Scientist at CPI California. It was a fresh experience for most of the attendees to took part in a virtual IV as being so disconnected due to the pandemic. The speaker also played her role very well as she caught everyone's attention with her outstanding skill of presentation.

In the beginning, she captured the participants heed through describing the working environment of CPI, the working mentality and the scope of the work. The topics covered were how they are the global manufacturer of electronic communication, defense and medical markets, industrial, scientific markets, new vacuum tubes for the broadcasting, radar, and other applications. After that market served and the CPI Divisions were also specified in an expounded way

After a brief overview the moment came what everyone was waiting for the virtual tour of the industry. Monica Blank had already prerecorded her video and she played it while narrating and explaining the area in live action. The attendees were quite thrilled to finally be able to be a part of the practical work environment.

It's common to have queries after attending such a sophisticated discussion. So, a Q/A session was methodized for inquiring the queries and erasing the doubts regarding the whole deliberation. It was the highlighted phase of the entire discussion. Many of the attendees were exhilarated to interact with such an eminent faculty and they utilized their opportunity of asking questions brilliantly.

The overall session was marked as an imprinted success, as the number of attendees joined in this virtual IV were around 120 from various colleges which manifested the fact that the session was able to open the era of creative portal in students mind.

The session ended up at 9:00PM. It was substantially beneficial for the ardent participants to know about the CPI and its relating objectives in industrial field.

Perks of Being an IEEE Member



Virtual Poster

IEEE Student Branch College Of Engineering Karunagappally conducted a webinar on Perks of Being an IEEE Member by Er Anandhu S Kumar ,Senior Executive, Wipro lighting on 13th December 2020 at 7 pm (+IST).

The session commenced with brief introduction on the history of IEEE and how it became so established as one of the the best technical organizations in the world. He explained what is IEEE and its benefits in a seemingly complex way to emphasize how broad it is and then formulated the simpler fragments. He explained how the global exposure helps to maintain a technical balance in the universities

He recalled his experiences as the 2017 Chair, IEEE SB CEK. He told the fresher students about the struggles the institution had been through and all the prestigious achievements received, it's mile-

stone awards and national level events which are much appreciated everywhere. He pointed out the volunteers visiting China, Texas and USA on the basis of travel grants. His presentation slides were very captivating which could hold 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. Center of attention of the session was the topic "what IEEE offers you " wherein he conveyed the Importance of being an IEEE member. He said that it is all about being competitive and again taking personal responsibility for our career. IEEE's benefits include venues and tools for members to network, build valuable professional connections, and hone leadership skills. He further added that IEEE membership is more than what we receive—it's also about what we are giving back.

In the last part of the session participants interacted with him sharing their doubts and queries on IEEE. Around 60 participants have showed up in the session. Participants gave enormous positive feedback on the session. Some of the participants came forward and talk what they got from the session and thanked the volunteers to us for organizing such a session.



**Congratulations to
all Winners**



PowerUP
Quiz Competition
Winners

1ST
Anagha N
S4 CSE

2ND
Lavanya E V
S4 CSE

IEEE SB CCEK



IEEE IA/IE/PELS Jt. Chapter Kerala

IEEE PELS DAY
POWERING A SUSTAINABLE FUTURE

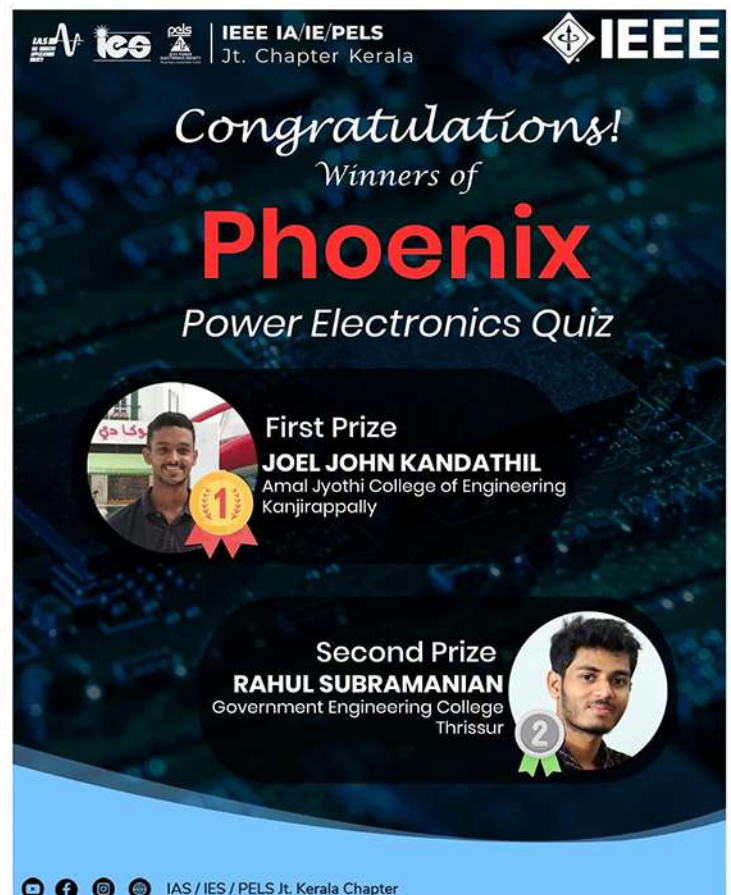
Congratulations
Winners of
Future Energy Design Contest

IIST
G G D V Sai Pavan
V. Harshith Reddy

1ST
IIST
Mullikarjun Kompella
Pragya Yadav

TKM
Nirmal A Kumar, Navaneeth M
Allan Sabu Joseph, Jithin J

@ia.ie.pels.ieeeekerala.org | #ieeciaskerala | #ieeciapelskerala



IEEE IA/IE/PELS Jt. Chapter Kerala

IEEE

Congratulations!
Winners of
Phoenix
Power Electronics Quiz

First Prize
JOEL JOHN KANDATHIL
Amal Jyothi College of Engineering
Kanjirappally

Second Prize
RAHUL SUBRAMANIAN
Government Engineering College
Thrissur

IAS / IES / PELS Jt. Kerala Chapter



Congratulations
Winner

Team 34 - Advance Health Mentoring Kit



Sneha N



Nikhil Amala Jerrin



Kishore S



Sivasambath K



**Find
the**

R

Winners



Sneha Kadangot
S6 CSE



Haritha M E
S2 EEE



LOLLAPALOOZA

Rig It Up
Winners



Haritha M E
Portico Warriors



Prajul G
Cicada 3310



Rhithika Damodaran
Illuminati

IEEE SB GCEK



Call For Papers

PESGRE 2022

2-5 January 2022
Kovalam, Trivandrum,
Kerala, India



The IEEE International conference on "Power Electronics, Smart Grid and Renewable Energy (PESGRE 2022)" is a biennial conference organized by IA/IE/PEL Jt. chapter Kerala. The conference is sponsored by IEEE Industry Applications Society, IEEE Kerala Section, IEEE IA/IE/PEL Jt. Chapter Kerala, IEEE Power Electronics Society, IEEE Power & Energy Society, and IEEE Industrial Electronics Society. The theme of the conference is "Power Electronics and Renewable Energy for Sustainable Development" and will be held from 2 to 5 January 2022 at Kovalam, Trivandrum, Kerala, India.

Technical papers are solicited on subjects pertaining to the scope of the conference that includes, but is not limited to the following topics:

- Power Electronic Converters, Control Systems, EMI/EMC
- Electric Drives and Electric Vehicles
- Smart Grid and Micro grid
- Renewable energy Resources, Distributed Generation and Grid Interconnection
- Energy Storage and Battery Charging Technologies
- HVDC, FACTS, Power Systems and Power Quality
- Wide band-gap devices
- Lighting & illumination
- Energy policies & Standards
- Power Electronics Education

Paper Submission

Authors are invited to submit 6-page full paper in standard IEEE format for review. All accepted and presented papers at the conference will be included in the IEEE Xplore Digital Library. Extended versions of all presented papers will be eligible for further review and possible publication in IEEE Transactions on Industry Applications.

For more details, please visit www.pesgre2022.org

IMPORTANT DATES

Paper submission
opens:

01 MARCH 2021

Paper submission
closes :

01 JUNE 2021

Notification of
Acceptance:

01 AUGUST 2021

Camera-ready
Paper submission :

01 SEPTEMBER 2021

General Chairs :

Dr.R.Sudharshan Kaarthik, IIST Trivandrum &
Prof. Pragasen Pillai, Concordia University Canada

TPC Chair :

Dr.Jaison Mathew, GEC Thrissur

Organizing Chair:

Dr.K.Biju, College of Engineering Munnar

