

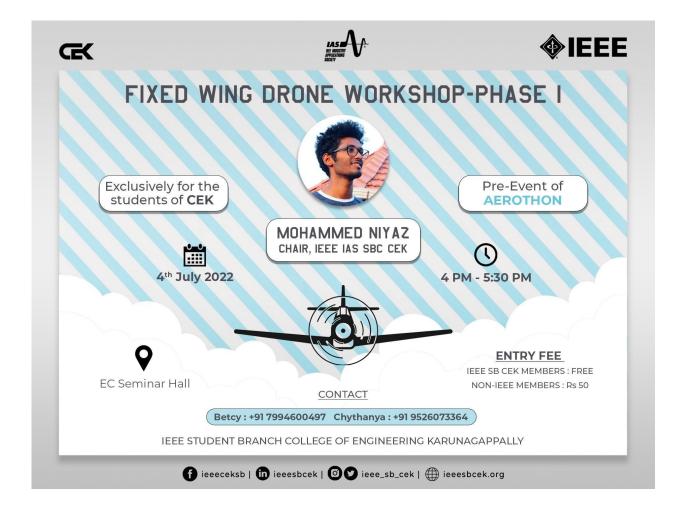


IEEE Industry Applications Society
Student Branch Chapter
College of Engineering Karunagappally



#### FIXED WING DRONE WORKSHOP PHASE - 1

### **EVENT REPORT**



The IEEE Industry Applications Society Student Branch Chapter College of Engineering Karunagappally organized a fixed wing drone workshop on the 4th of July 2022. The workshop was handled by Mohammed Niyaz - Chair, IEEE IAS SBC College of Engineering Karunagappally. This workshop was the pre-event of the upcoming fixed wing drone competition titled AEROTHON which is planned in the month of September. A total of 35 students took part in the phase 1 of the workshop from different engineering disciplines. The workshop covered the basics of flight theory, explanation of different aircraft parts, flight control surfaces, types of drones, basics of fixed wing drones, applications of fixed wing drones etc. The students were divided into 2 teams and were made to design and cut out the parts required to build a simple fixed wing drone out of a 4mm foam board material.





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

### Images from the workshop





### KESKUSTELU 2022 - DEBATE ON "ELECTRIC VEHICLES vs HYBRID VEHICLES"



The IEEE Industry Applications Society Student Branch Chapter College of Engineering Karunagappally in collaboration with IEEE Power and Energy Society Student Branch Chapter College of Engineering Karunagappally and IEEE SB CEK organized a debate session called "Keskustelu" on the topic "Electric Vehicles vs Hybrid Vehicles" held on 29th July 2022 in the google meet platform. A total of 30+ students took part in the dynamic debate which brought in various points and ideas with respect to the impact the two vehicles have on the environment. The current specifications and future modifications and capabilities were are also part of the debate. The inheritance of hybrid and electric powertrains from motorsports to road cars were also a major highlight in the session. The vast majority of the participants were involved in the session and was made more fruitful and interesting. Other major discussions were made on the powertrains, battery packs, regenerative braking and other technologies were also a major part of the discussion. The session was concluded within one hour with a short feedback session at the end.

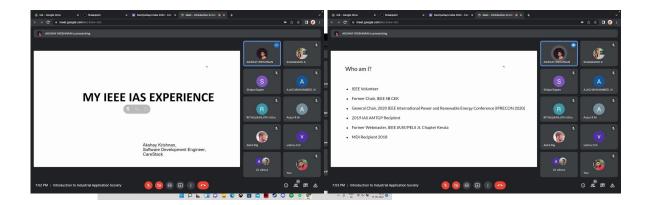
#### INTRODUCTION TO IEEE INDUSTRY APPLICATIONS SOCIETY

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

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

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

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



## 2022 IEEE International Power and Renewable Energy Conference (IPRECON)

2022 IEEE International Power and Renewable Energy Conference (IPRECON) - 3rd edition of India's first & only IEEE IAS Club of 6 Technical Paper Conference organized by IEEE Student Branch College of Engineering Karunagappally (IEEE SB CEK) and technically sponsored by IEEE Power and Energy Society, IEEE Industry Applications Society and IEEE Power Electronics Society was held from 16th to 18th December 2022. The conference was attended by a large number of experts and scholars especially in the field of electrical and computer science and was held in hybrid mode. The conference covered a wide range of topics and was a platform for presenting the latest research and advancements in the field.

The inauguration of the 2022 IEEE International Power and Renewable Energy Conference was held on the 15th of December 2022 in online mode. The conference also consisted of keynote sessions, student professional awareness tracks and mentoring sessions. A total of 165 quality papers from various fields were accepted for presentation from among a total of 311 papers received and 122 papers were presented at the time of the conference. These papers covered a

diverse range of topics and were carefully selected for their contribution to the field and the quality of their research.

The keynote sessions were particularly noteworthy and provided attendees with a deep dive into some of the most pressing issues facing the field. These sessions included insightful talks from leading experts and were well received by the audience.

Overall, the conference was a huge success and provided a valuable opportunity for researchers and practitioners to come together, share their knowledge and ideas, and collaborate on new projects. The conference provided a platform for attendees to learn about the latest advancements in the field and to engage in meaningful discussions with other experts in the field. The conference was well-organized and provided attendees with a wealth of information and insights that will help to advance the field.







# Akshara Sunil - Secretary ,IEEE SB CEK Represented IEEE IAS SBC CEK at the IEEE IAS Annual Meeting held at Detroit , USA



Akshara Sunil - Secretary, IEEE SB CEK Received the Annual Meeting Travel Grant Program (AMTGP) fund to attend the IEEE IAS Annual Meeting held at Detroit, Michigan, USA from 8th to 14th October 2022 to receive the IAS CMD Chapter web Contest award (3rd place) and the IAS CMD Outstanding Chapter Advisor Award for Prof. Haseena P Y . She took the honors to represent the student branch and IAS chapter of IEEE SB CEK and successfully presented the chapter presentation . She also had the cance to attend the mandatory IAS CMD Workshop and the ECCCE conference which was being held in parallel . She was also the only representative from the IEEE Kerala Section to attend the IEEE IAS Annual General Meeting 2022.



