## **IEEE ANNUAL REPORT 2022-23**

Young wizards was a school outreach program organized by Mar Baselios College of Engineering and Technology(Autonomous), hosted by IEEE MBCET SB in collaboration with the Outreach Cell of MBCET on 2nd July 2022. The main aim of the event was to bring a scope of fun learning and a quest for the latest technological trends to school students. Through this event, the students were able to explore the latest technologies along with having a fun time exploring the college campus and participating in the wide variety of games that were arranged for them.

A TinkerCad Simulation Competition was conducted by IEEE SB MBCET in collaboration with Travancore Hub as part of Hub War on 8<sup>th</sup> July 2022. The participants were asked to design and simulate a PWM circuit(using specific components) on Tinkercad.

IEEE PES SBC MBCET in association with the institution's innovation council has organized a talk session on Promoting Research and Innovation in Contemporary Times in Higher Education. It was conducted on 14th July. The talk was delivered by PROF. SIVAJI CHAKRAVORTI. The speaker discussed the application of research and experimentation in Higher Education in depth.

IEEE Computer Society MBCET SB conducted Code-Inator on 8th August 2022. The event was aimed at improving problem-solving skills and giving hands-on experience with coding. It was a coding competition. The results were declared on the basis of scores generated on hacker rank and the time taken by each participant.

IEEE SB MBCET was awarded the Darrel Chong Student Activity Award under the silver Category in recognition of the event code Xtreme which was conducted in 2021 by the Computer Society in accordance with the IEEEXtreme Coding competition. The event was coordinated by Adinath Ajith Naik and Karthika Sankar U. The Darrel Chong Student Activity award acknowledges and honors the student branches which are consistent in their innovation, endeavors, and membership growth. It reflects the commitment of the student branches to exhibit quality events for the betterment of the student community.

Symposium was an online case-study presentation submission competition. The theme for the event was "Leveraging Technology for a Better Tomorrow". The event was from the 11<sup>th</sup> to the 14th of October 2022. The presentations were evaluated by Kesia Mary Joies, chairperson(2021-22) of IEEE SB MBCET and current Product Engineer at UST.

IoT Garage was conducted by IEEE RAS SBC LBSITW in collaboration with IEEE RAS SBC MBCET at LBS Institute of Technology for Women (LBSITW), Poojappura on 15th and 16th of October 2022. The boot camp provided a complete guide, hands-on experience, and a great pathway for the participants transitioning from manufacturing work to the technology field. The speakers and mentors of the event were students from Mar Baselios College of Engineering and

Technology(MBCET). At the end of the session, the teams were asked to present their own ideas having IoT applications.

As a part of IEEE Day Celebrations, IEEE PES MBCET conducted "UNLEASH" – a poster-making competition. The theme was – "Leveraging Technologies for a better tomorrow". The announcement was made on October  $13^{th}$ , 2022.

IEEE WIE AG MBCET conducted " प्रथम नारियां- The Great Indian Women"- a quiz competition. The event saw active participation from all over Kerala. The event was aimed to spread awareness about the great women of India.

IRIDESCENT was an online photography competition. The theme of the event was "Capturing the essence of Diwali". The event was conducted on 22<sup>nd</sup> -25th October 2022,

IEEE SIGHT conducted a webinar on the topic "Cybercrime Awareness and Opportunities in Cybercrime" for students on 29<sup>th</sup> October 2022. Students were able to learn about phishing scams, malware, ransomware, and other computer threats. The event was aimed to make the students aware of such threats and also to show the wide range of opportunities available in this field.

IEEE PES SBC MBCET organized a talk session on the Integration of IOT in Solar PV Systems for Performance Ratio Assessment and Interpretation on 2nd December 2022. The talk was delivered by Mr. SREERAJ S.V. The speaker discussed the new aspects of IOT and Solar PV systems. The session was very productive and interactive.

shrIEEEk is the flagship event organized for first-year students on 3rd December 2022. They are introduced to IEEE and its working through this event. The branch councilor of MBCET SB, Mr. Jinu Baby gave the students an idea about IEEE and the different opportunities associated with it. There was an interactive talk session by one of MBCET alumni, Mr. Sanju Mathew, about his experience in IEEE and the doors it has opened up for him. Different fun games were conducted for students to interact with each other. The event concluded with a cake-cutting ceremony and a photo session.

In association with ASCE MBCET, IEEE PES SBC MBCET organized a talk session on Energy Conservation Building Code (ECBC) & Eco Niwas Samhita (ENS) Awareness Program - An initiative by Energy Management Centre. The talk was delivered by Mr. V JAYAPRAKASH. The speaker discussed the need for energy management and methods to achieve it. The session took place on 16th December

In association with Illumina MBCET, IEEE PES SBC MBCET also conducted a tech fest that consisted of four events, on the 17th of Dec 2022.

The first event was "EXPO", an automobile exhibition, which consisted of 9 two-wheelers and 3 four-wheelers.

The second event was a VFX workshop based on career opportunities in Animation, VFX, AR/VR, and Gaming. It was conducted by MAAC (Maya Academy of Advanced Cinematics) Academy, Trivandrum.

The 3rd event was EV WORKSHOP which primarily focussed on the basic aspects and advantages of Electric Vehicles.

The 4rth event was ELECTRO HUNT which was based on circuit designing and debugging. This competition only required some basic knowledge of normal series, and parallel circuit reduction.

IEEE EMBS MBCET, in association with IIC and ECED, conducted a talk session on "Biomedical Engineering - Is it for you?". The event had 3 sessions.

SESSION 1: handled by Mr. Sarath S Nair, Scientist/Engineer F, BMT, SCTIMST, on Advances in Biomedical Engineering

SESSION 2: handled by Mr. Balram Sankaran, Scientist - G, Founder CEO, SCTIMST-TIMed on Creating Values from your Medtech Ideas.

SESSION 3: Interaction with the Students.

The event then continued with a Principal's Address by Dr. Abraham T Mathew, Principal, MBCET, followed by an MoU signing between SCTIMST-TIMed and MBCET in the presence of Fr. John Varghese, Bursar, MBCET.

In association with Illumina MBCET, IEEE PES SBC MBCET organized a seminar in association with Global Study Link on 23rd January 2023. The speaker discussed the various higher studies and job opportunities in the UK. The session was very productive and interactive.

The Annual General Meeting of IEEE SB MBCET took place on 15th February 2023 where the execom members were introduced for the academic year 2023-2024. The ex-execom members handed over the duties and responsibilities to the new execom members.

IEEE PES SB MBCET in association with the Department of Electrical and Electronics Engineering conducted a National Seminar on Electric Vehicles on 17th February 2023. A total of 73 participants were present for the seminar and eminent resource persons took seminars on various topics related to Electric Vehicles.

Poetry Panache 2.0, a poetry competition was conducted by IEEE WIE AG's of MBCET, RIT, CEV, LBSCEK as a part of WIE week celebrations 2023. Theme of the poetry competition was 'Gender Equality'. The event was conducted online and the deadline for the submission was on 12th March

HASSLE, the debate competition was conducted by IEEE PES SB MBCET & IEEE WIE AG MBCET on 24th March 2023 at Faraday Hall as a part of Science Month. Individual topics under the broad topic of "Global Science for Global Wellbeing" were debated upon. There were a total of 12 participants.

Exquizits, the quiz competition was conducted by IEEE EMBS SB MBCET, IEEE SIGHT AG MBCET & IEEE CS SB MBCET on 31 st March 2023. The quiz consisted of 20 questions. 30 students participated in the event.

INTELLECTUS, the technical report writing competition was conducted by IEEE RAS SB MBCET & IEEE SPS MBCET on 29th March 2023. The theme of the competition was "Global Science for Global Wellbeing". A total of 20 members participated for the event.

"Do-A-Doodle" doodle art competition was conducted by IEEE PES SB MBCET, as a part of IEEE PES DAY 2023 celebrations, based on the theme of "Powering A Climate Safer Future". A total of 6 participants were present

IEEE PES SB MBCET conducted a talk session on "The Role Of Sustainable Energy For A Safer Future" by Dr. Dishore SV, Assistant Professor, MBCET on 22nd April 2023. The talk session was conducted as part of IEEE PES DAY 2023 celebrations. A total of 47 participants attended the session.

IEEE PES SB MBCET also conducted a blog writing competition, "Eco-Blogging: in connection with the IEEE PES Day Celebrations on 24th April 2023. The topic was "Seeing the Unseen-We must change faster than climate change". A total of 10 participants were present.

Enthalpy, a one-day Membership development session was conducted by IEEE Travancore Hub in collaboration with IEEE Link and IEEE Region 10 student activities committee on the 20th of May, 2023. The venue support was provided by IEEE Student Branch Chapter, MBCET. The event was a great success and more than 50+ participants were present.

The environment day celebrations were conducted by IEEE SBC MBCET in collaboration with IEEE PES SBC MBCET on the 9th of June,2023. A total of 10 students and 4 faculty members

participated in the event. A custard apple sapling was planted in the Chapel premises by the chair, secretary and faculty advisor of PES. The environment day oath was taken by the participants present