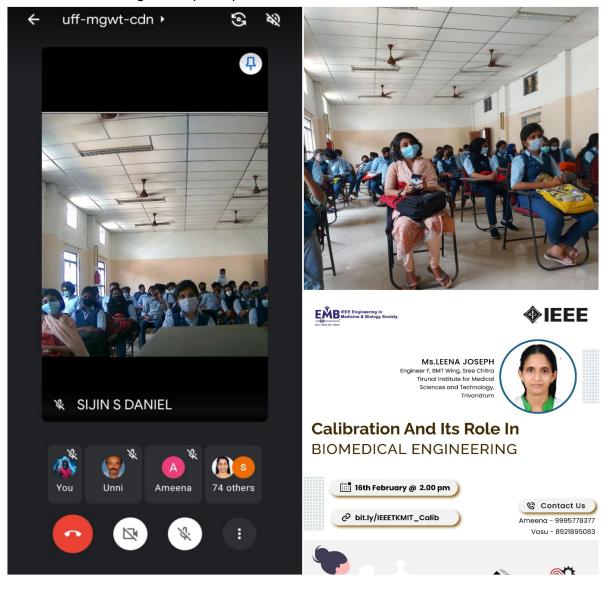
# TKMIT IEEE EMBS SBC REPORT

# WEBINAR ON CALIBRATION AND ITS ROLE IN BIOMEDICAL ENGINEERING

Date:16th February 2021

IEEE EMBS SBC TKMIT in association with BLAZE TKMIT organised a webinar on "The importance of Calibration and its role in Biomedical Engineering". The speaker for the session was a flourished professional, Ms. Leena Joseph, Engineer F, BMT Wing, SCTIMST. The webinar was from 2:00pm-3:00pm on 16th february 2021 and was conducted via google meet. The webinar had 118 registrations and got an overwhelming response. The webinar was also streamed live and registered participants from TKMIT attended it in EC Seminar Hall.



#### WEBINAR ON EARLY DETECTION OF AUTISM AND RECOVERY

Date:2nd April 2021

As part of World Autism Awareness Day,IEEE EMBS SBC conducted a Webinar on "Early Detection of Autism and Recovery". It was a one hour session conducted from 7pm to 8pm on 2nd April 2021. The speaker for the session was Dr.Reshmi Pramod, founder and MD of Jeevaniyam Ayurveda Hospital and Research Centre and a professional with 12 years of experience in Health care Industry and involved in rehabilitation of children with special needs. The speaker gave a brief discussion on all the aspects related to autism and its recovery. The session was an interactive and informative one. The session had 90 registrants from various colleges.



# INDUSTRIAL VISIT TO SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY

Date:8th April 20216

The final years and EMBS members of Biomedical Department visited SCTIMST for a one day Industrial visit under the guidance of Dr.Nitha V Panicker,Asst.Professor,TKMIT.The visit also included 4 staffs of BM Dept including Dr.Unni C,HOD of BM Dept.The students were able to acquire practical knowledge interacting with various professional working under different laboratories and also learnt about the various ongoing researches and the machineries and equipments used in these researches.It was indeed a learning experience.



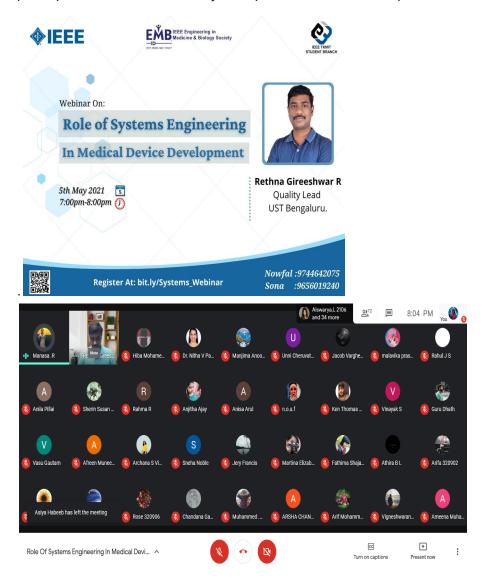


TTK CHITRA VALVE



# WEBINAR ON ROLE OF SYSTEMS ENGINEERING IN MEDICAL DEVICE DEVELOPMENT Date:5th May 2021

A 1-hour session on "Role of Systems Engineering in Medical Device Development" was conducted on 5th May 2021 from 7:00 pm-8:00 pm. The Speaker for the event was an Industry Professional, Mr. Rethna Gireeshwar R, Quality Lead, UST Global, Bengaluru. The speaker gave an introductory idea on Systems Engineering and its various domains. The webinar had 108 registrations and was conducted via google meet. It was an interactive session where participants were able to clarify their point of view on the topic



# PRE SYNAPSIS AT A GLANCE

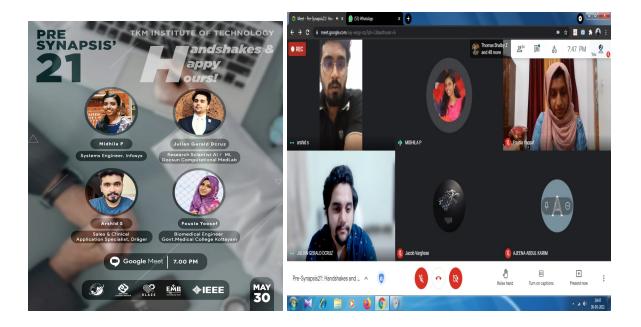
# • Opportunities in Med-Tech Industry:

Day 1 of PRE-SYNAPSIS'21 commenced on May 29th 2021, at 19:30 IST. It was a webinar where Mr. Abdul Rahman Shariff, Medical Devices Consultant, shed light on Opportunities in Med - Tech Industry. For this invaluable session we had innumerous registrations and on par with it an enormous count of participants. As the name itself suggested, the participants along with Mr. Abdul Rahman Shariff did explore the various opportunities in the Med-Tech Industry. The participants also raised a copious amount of queries and then, this eye-opening session came to an end within the scheduled time, 20:30 IST.



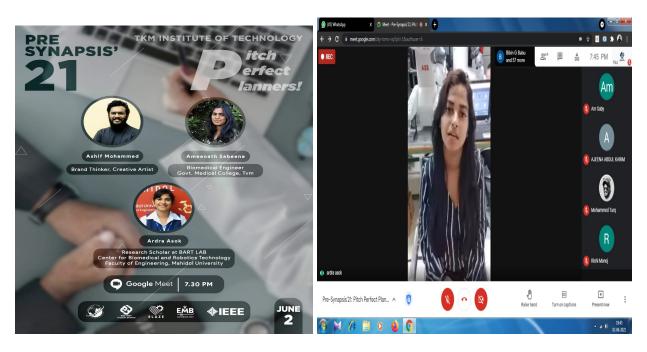
# Handshakes and happy hours

The Second day of PRE SYNAPSIS'21 was "Handshakes and happy hours' with four of our amiable seniors who excelled in their field talked about and introduced The Biomedical Department's Organization, BLAZE to the Juniors. They were Midhila p(system software engineer, Infosys), Julian Gerald Dcruz G(Research scientist Al/ML Docsum computational MedLab), Arshid S(sales and clinical application specialist, Drager), Fousia Yousaf(Biomedical engineer, Govt Medical college Kottayam). This was a 2 hours session commenced on 30th May 2021 At 7 Pm with almost 85 Participants. It was an informal session in which they shared their experiences and lessons. Their talks were interesting and informative and we got an overwhelming response from our participants. Thus it paved a great way for our upcoming events.



# Pitch Perfect Planners

As a continuation of Handshakes and Happy Hours, "Pitch Perfect Planners" was conducted. Three of our enthusiastic seniors talked about working as a Biomedical Engineer, Being a Graphic Designer, and Experience getting sponsored research. It was taken by Ameenath Sabeena( Biomedical Engineer, Govt. Medical College, Tvm), Ashif Mohammed ( Freelance Creative Artist), Ardra Asok(Research Scholar at BART LAB, Mahidol University). This was a 2 hours session conducted on 2nd June 2021.



#### Protomata

The four-day series of PRE SYNAPSIS'21 marked its conclusion by conducting a virtual prototyping competition 'PROTOMATA'.Out of 15 Registrations,7 contestants participated. The program was flagged on 4th June 2021, from 10 am to 6 pm. The Prototyping competition aimed to familiarize with virtual prototyping and develop problem-solving skills. The first position was grabbed by Joel Biju of Providence Engineering College and was awarded a cash prize of Rs.500. Followed by Ratna Kumar and Aditya Nandakumar bagging second and third positions respectively.



## SYNAPSIS'21

Synapsis'21 was jointly organized by the Department of Biomedical Engineering Association, IEEE EMBS SBC TKMIT in Collaboration with IEEE EMBS Kerala Chapter, Telemedicine Society of India, Kerala Chapter, and Digital Health India Association focusing on the theme "Telemedicine and E-health and gave a broad cognizance about Digitalization in Healthcare amidst Pandemic. The event was embellished with a good number of speakers expertise in the field of Telemedicine that continued for four days starting from 17th June 2021 and had 750+ registrations from 14 states including Students, Graduates, and Professionals. The event lowered its flag on 20th June 2021.

#### **SYNAPSIS'21 AT A GLANCE**

## DAY 1

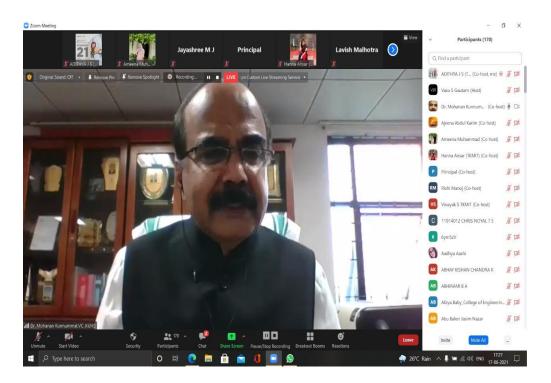


## Session 1:

The Day 1 inaugural event was on 17th June 2021 at 5:00 pm, live on both Zoom and Youtube. The auspicious event started with participants respectfully stating the IEEE EMBS code of ethics initiated by Dr. M J Jayashree, Student activities chair of IEEE EMBS Kerala chapter, and a Welcome Address by Ms.Ameena Muhammad, Chair, IEEE EMBS SBC TKMIT. The session was Presided by Dr.Jose Prakash, Principal, TKMIT. It was then successfully inaugurated at 5:30 pm by the first guest speaker, Dr. Mohanan Kunnummal, Vice-Chancellor, Kerala University of Health Sciences. He continued handling the session for the next 1 hour giving an insightful talk about 'The Practice of Telemedicine and Teleradiology in India Today'. The 150+ participants felt the whole session and presentation equally informative and interesting. They raised their queries about the same towards the end of the session.

The event was continued by felicitations presided by Dr. Manoj B S, chairperson of IEEE EMBS Kerala Chapter where he gave a brief introduction of IEEE EMBS to the delegates continues by Dr. Prem Nair, President, Telemedicine Society of India Kerala Chapter, and Dr. Unni C, HOD of Biomedical Department of TKMIT.

Towards the end of the first session of the day, the team launched their official website to the gathering. The session crossed 1000 Views on Youtube.



#### Session 2:

The second session of Synapsis'21 started at 7:30 on 17th June 2021. Over 200 participants were actively present throughout the session which was handled by Ms. Sudhamony S, Chief consultant, eHealth Kerala Project, Department of health, and FW. Govt. of Kerala. The respected guest of honor shared a great presentation and informative session on the topic 'E-health in Kerala'. It included information on features, project components, and the current state of implementing e-health in Kerala. The session was extended with a lot of queries raised by the curious participants. The speaker ended the session making sure all the queries were cleared and thus giving a clear idea about the topic to all.



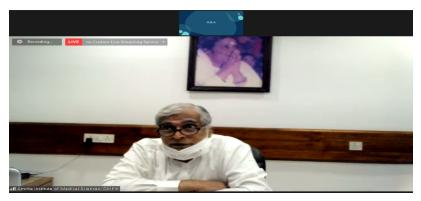
# DAY 2



# Session 3:

The third session of Synapsis'21 started at 6:00 pm on 18th June 2021. The guest of honor who took over the session for the hour was Dr. Prem Nair, Medical Director of

Amritha Institute Of Medical Sciences and Research Centre (AIMS) Cochin, Kerala. He shared wide knowledge about 'Application of Telemedicine and E-Health, Amritha experience'. The session marked about 180 participants who eagerly interacted and raised their questionnaires to the speaker. The speaker ended his session by clearing all the questions raised and thereby making the whole hour maximum informative. The session came to an end at 7:15 pm after presenting the guest a virtual memento by the team heartfully thanking him. The session had 587 views on Youtube.



# Session 4:

The 4th session of Synapsis'21 was commenced at 7:30 pm on June 18th, 2021 after a short break from the previous session. The concave was in the presence of Mr. Vimal Wakhlu, the Former Chairman and Managing Director, TCIL, Former president of, Telemedicine Society of India. He gave an enlightening knowledge about 'Implementing Telemedicine and Digital health, Leveraging Emerging Technologies. He shared his experiences from his career and shared an informative presentation about the topic that included topics like Robotics in health, Artificial Intelligence and Health, and so on. He gave ideas about opportunities and challenges in the future which helped the participants a lot. The 1-hour session was very interactive and equally informative, continued by a QnA session where questions were raised by the curious delegates both in Zoom and YouTube live. The whole team conveyed their gratitude to the speaker by presenting him a virtual memento after which the session came to an end at 8:45 pm.

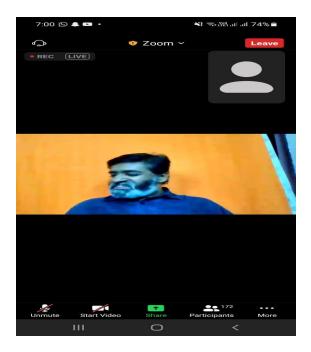


# **DAY 3:**



# Session 5:

The third day of Synapsis'21 was started with the session about 'Telemedicine: Yesterday, Today & Tomorrow' by Mr.Bijoy M.G, Managing Director, Unarv Telemedicine & Healthcare Services, and also Executive Committee Member, TSI, Kerala Chapter. It was held on 19th June 2021 at 6:00 pm on the Zoom platform with a live telecast on Youtube as well. His insights on different phases of Telemedicine were very informative to know. And also the future of telemedicine was explored in his session. The participants had cleared their queries about Telemedicine through a QnA segment and the session ended with all the doubts cleared and handing the eminent speaker a virtual memento as a token of appreciation.



# Session 6:

On 19th June 2021, the latter session started on 7:30 pm by Dr.Uma Nambiar- the well-known Neurosurgeon, Chairperson of Digital Health India Association also the Executive Director of Gimcare Hospital. She unveiled the 'Opportunities for Young Engineer in Telehealth Ecosystem'. For the session, the Zoom Platform was overwhelmed with 150+ participants. The speaker gave a great presentation about new opportunities especially in the field of Clinical Engineering and Tele ICU. The session aroused curiosity for many budding engineers around the world to know more about Telehealth Ecosystem. The session ended at 8;30pm with a feedback note by Malavika Prasad and a virtual memento was presented to the illustrious speaker.Day 3 has got 465 views on Youtube.

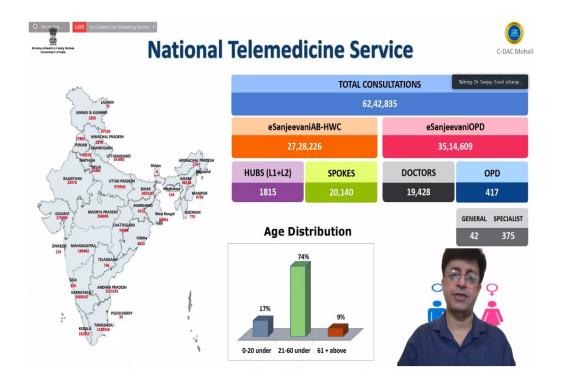


# Day 4:



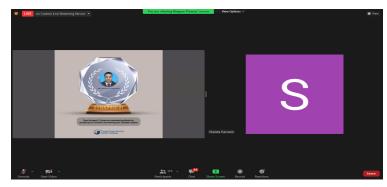
## Session 7:

The 7th session of Synapsis'21 was on the 4th day, 20th June 2021. The first session of the day started at 11:00 am. The one-hour session was handled by Dr. Sanjay Sood projector Director- E-Sanjeevani, Associate Director-Centre for Development of Advanced Computing, Mohali. Mr. Sood took over the session giving an intelligible presentation about 'E-Sanjeevani Digital Health Innovations in practice'. He gave a lot of information about the e-Sanjeevani platform which is the upcoming most useful teleconsultation platform. The delegates raised the queries and were happily satisfied with all the knowledge they could get. The session however ended at 12:15 am after the whole team expressing their gratitude to the guest of honor.



# Session 8:

On 20th June 2021, Synapsis'21 presented its 8th session at 6:00 pm. The session marked the presence of Mr. Farooq Ahmad Wani, State Nodal Officer (telemedicine), J&K Superintending Engineer, Sheri-i-Kashmir Institute of Medical Sciences, Srinagar. He shared a one-hour session about his insights on 'Leveraging Telemedicine in Healthcare Delivery System in Jammu and Kashmir'. The pieces of information imparted by the session included ICT in healthcare, education, hospital management, etc. The participants were left answered by all the questions raised by them and finally the session came to an end at 7 pm. With due respect, the team thanked the guest speaker with a virtual memento as well.



Session 9:

Synapsis'21 marked its final session of the national webinar series on 20th June 2021 at 7:30 pm. The guest speaker for the time was Dr. Murthy Remilla L N who is the head of Project management, Human Spaceflight Group, Human Space Program Of India, Gaganyaan, ISRO. He enlightened the participants with his expertise session on 'Evolution and Growth of Telemedicine in India'. He kept the delegates attentive throughout the session by making his insights interesting. He even shared concepts like mobile telemedicine, origin, and future of telemedicine, and more. The informative session came to its end at 8:30 pm after which a valedictory function was held for acknowledging the team.



The Valedictory Ceremony of Synapsis'21 commenced with a welcome note by Mr. Vasu S Gautam, Chair, IEEE SB TKMIT. The ceremony was presided over by Dr.Unni C, HOD. Dept of BME, TKMIT. The event continued with felicitations by Mr.Mahesh R Panicker, ViceChair, IEEE EMBS Kerala Chapter, and Mr.Bijoy M G, Hon. Secretary, TSI, Kerala Chapter. Mr.Aswin Raj V, Asst.Prof, Dept. of Biomedical gave a Valedictory message where he acknowledged the efforts behind the entire team, and the event was concluded with a Vote of Thanks by Mr.Anas A S, IEEE SB Counsellor, TKMIT.The final session crossed 500+views on Youtube.

#### WEBINAR ON IMPORTANCE OF INNOVATIVE PROJECTS AND PATENTS

Date:30th October 2021

IEEE EMBS SBC TKMIT in collaboration with BLAZE TKMIT organised a webinar on the topic **Importance of Innovative Projects and Patents** on 30th October 2021 at

7.30 PM. The session was conducted online and was handled by Dr.Gireeshan MG, Research and patent consultant. The purpose of the webinar was to engage an industry expert about the expectations and pedagogy required to bridge the gap between academia and the industry in various aspects. The session had 60 registrants and was very informative and interesting.

"Importance of Innovative Projects & Patents"

session by

Dr. Gireeshan M G
Research & Patent Consultant

30th Oct 2021
7:30 PM

# TALK ON BENEFITS OF IEEE AND EMBS

Date:10th December 2021

IEEE EMBS SBC TKMIT organized an induction program exclusively for first-year biomedical students to spread the wisdom of membership benefits of IEEE and EMBS to the aspiring young IEEE volunteers. It was a hybrid event of one hour conducted at 2 PM on 10th December at the seminar hall of TKMIT. The session was handled by Dr. M J Jayasree, Student Activities Chair, IEEE EMBS Kerala Chapter, Professor, and IQAC Coordinator MBCET, Trivandrum. It was an informative session with 50 participants and the speaker covered all the aspects related to IEEE EMBS.

