

# Annual Report for the Year 2021

## IEEE AP/MTT Kolkata Chapter

### Part A – Administrative

(Annual General Meeting, Committee Meeting, Connection with Local National Organizations meeting)

Total Number of Administrative meetings: 3

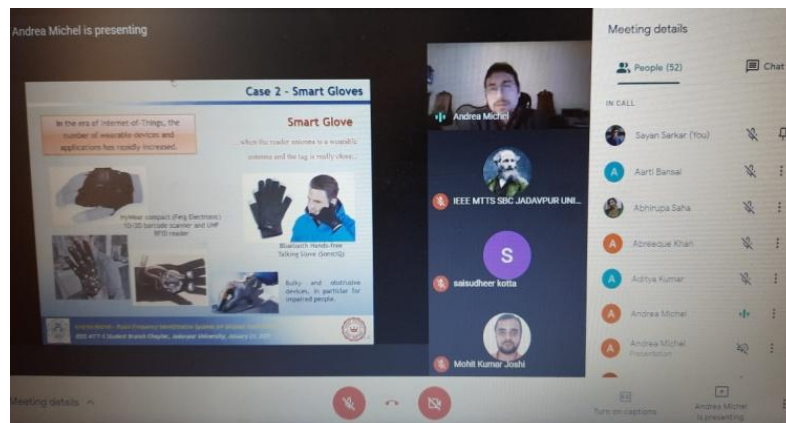
- The Annual General Meeting (AGM-2021) was held on 15<sup>th</sup> January, 2021 at the Google meet online platform. Sixteen members attended this meeting.
- Executive committee meeting was organized on 21<sup>st</sup> April, 2021 to plan about the future events. The issues related to technical support to the Conference organized by KIIT, Bhubaneswar and distinguished 'Microwave Lecturer's Talk' were discussed. Eight Ex-com members were present in the meeting.
- An executive committee meeting was held on 30<sup>th</sup> November to finalize the slate for 2022 for the AP/MTT Kolkata chapter. The issues regarding the organization of the Young Scientist Conclave was also discussed in the meeting. Seven Ex-com members attended the meeting.

### Part B – Subsection, Student and Affinity Group Activities

(Student /Young Professionals / Women in Engineering / Life Member /Humanitarian Activities /Educational Activities)

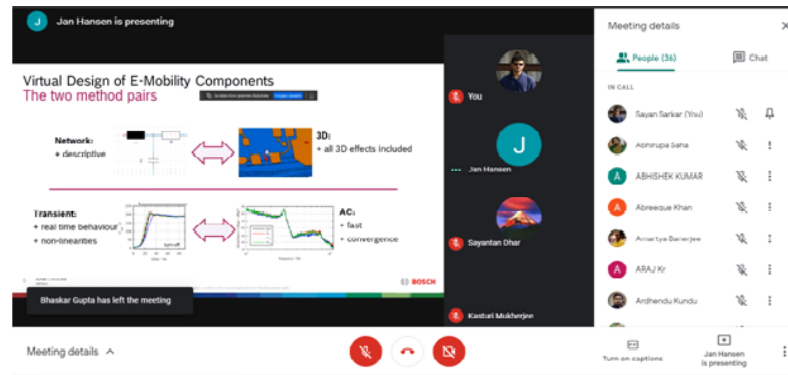
- **Webinar by Dr. Andrea Michel on 23<sup>rd</sup> January, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Radio Frequency Identification Systems for Unusual Applications*", on 23<sup>rd</sup> January 2021. The speaker for the program was Dr. Andrea Michel, University of Pisa, Italy. Fifty two participants attended the program.



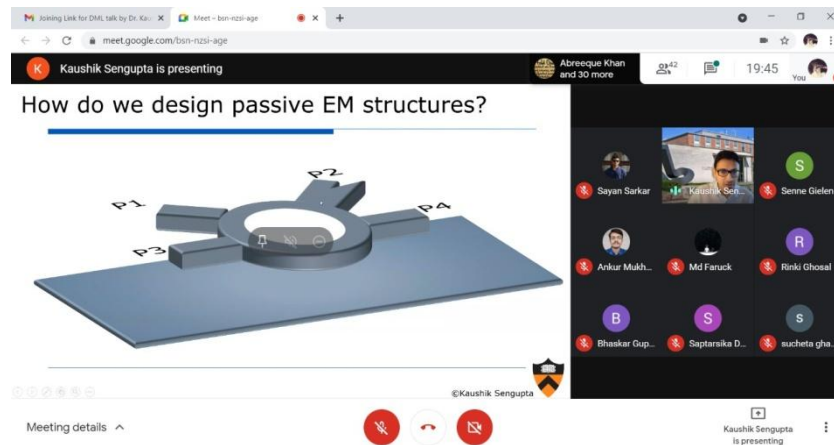
- **Webinar by Dr. Jan Hansen on 13<sup>th</sup> March, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Virtual EMC Design of E-Mobility Components*", on 13<sup>th</sup> March 2021. The speaker for the program was Dr. Jan Hansen, Robert Bosch GmbH, Germany. Thirty six participants attended the program.



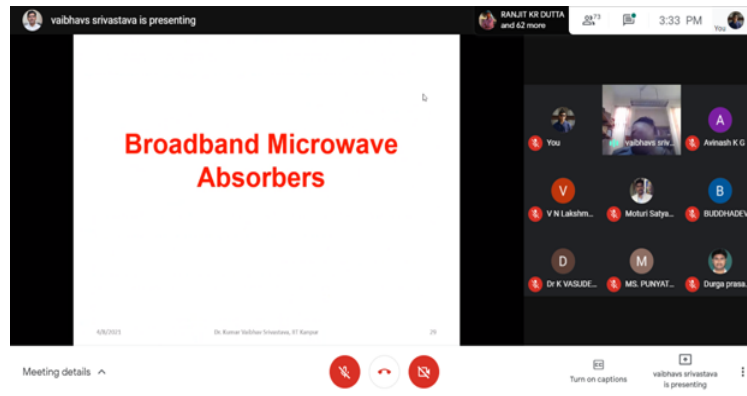
- **Webinar by Dr. Kaushik Sengupta on 21<sup>st</sup> March, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Towards Universally Programmable Chip-Scale THz Source, Sensors and Systems: Bridging the THz and Application Gap in the Next Decade*", on 21<sup>st</sup> March 2021. The speaker for the program was Dr. Kaushik Sengupta, Princeton University, USA. Forty two participants attended the program.



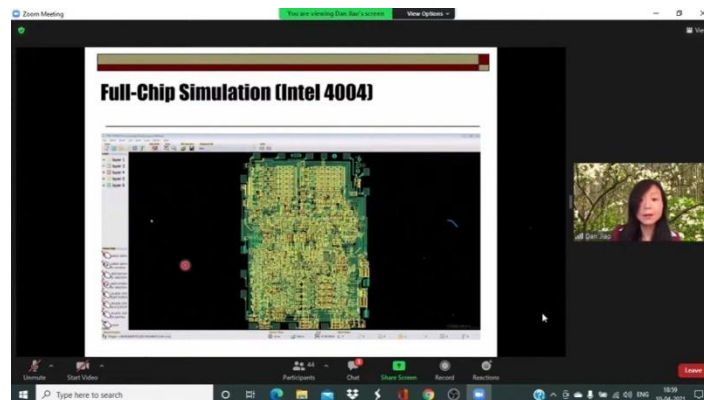
- **Webinar by Prof. K. V. Srivastava on 8<sup>th</sup> April, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Design and Development of Broadband Microwave Absorbers using Metamaterials*", on 8<sup>th</sup> April 2021. The speaker for the program was Prof. K. V. Srivastava, IIT Kanpur, India. Seventy three participants attended the program.



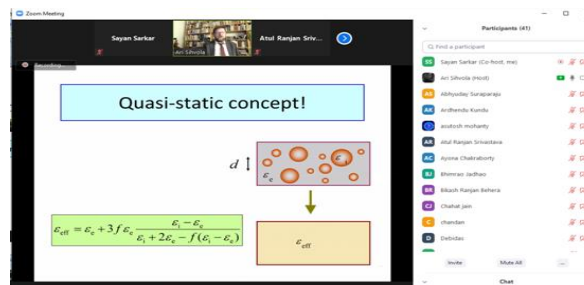
- **Webinar by Prof. Dan Jiao on 10<sup>th</sup> April, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Fast Solvers for Electromagnetics-Based Analysis and Design of Integrated Circuits and Systems*", on 10<sup>th</sup> April 2021. The speaker for the program was Prof. Dan Jiao, Purdue University, USA. Forty four participants attended the program.



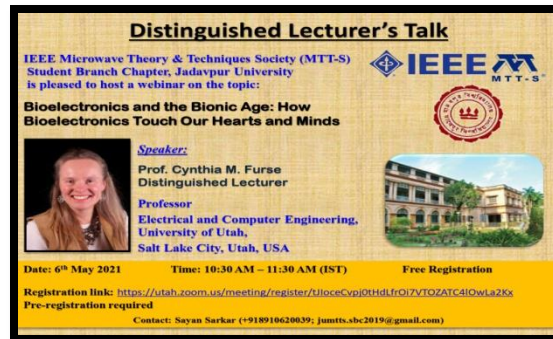
- **Webinar by Prof. Ari Sihvola on 8<sup>th</sup> April, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "*Modeling, characterization, and effective description of heterogeneous and composite electromagnetic materials*", on 8<sup>th</sup> April 2021. The speaker for the program was Prof. Ari Sihvola, Aalto University, Finland. Forty one participants attended the program.



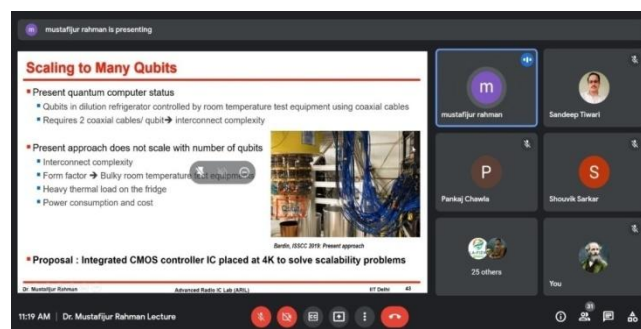
- **Distinguished Lecture talk by Prof. Cynthia M. Furse on 6<sup>th</sup> May, 2021**

IEEE MTT-s SBC, Jadavpur University organized a distinguished lecture talk on "Bioelectronics and the Bionic Age: How Bioelectronics Touch Our Hearts and Minds", on 6<sup>th</sup> May 2021. The distinguished speaker for the program was Prof. Cynthia M. Furse, University of Utah, USA. Thirty eight participants attended the program.



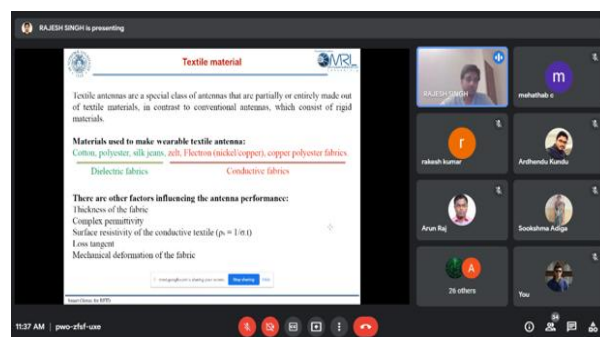
- **Webinar by Dr. Mustafijur Rahman on 31<sup>st</sup> July, 2021**

IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "Next Generation CMOS Radio ICs", on 31<sup>st</sup> July 2021. The speaker for the program was Dr. Mustafijur Rahman, IIT Delhi, India. Thirty one participants attended the program.



- **Webinar by Dr. Rajesh Singh on 14<sup>th</sup> August, 2021**

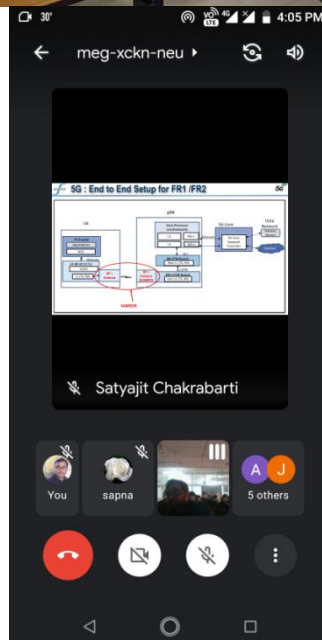
IEEE MTT-s SBC, Jadavpur University organized a technical webinar on "Smart Gloves for RFID", on 14<sup>th</sup> August 2021. The speaker for the program was Dr. Rajesh Singh, Post-Doctoral Researcher, University of Pisa, Italy. Thirty four participants attended the program.



## Part C – Professional Activities

- Lecture meeting on 10<sup>th</sup> March, 2021

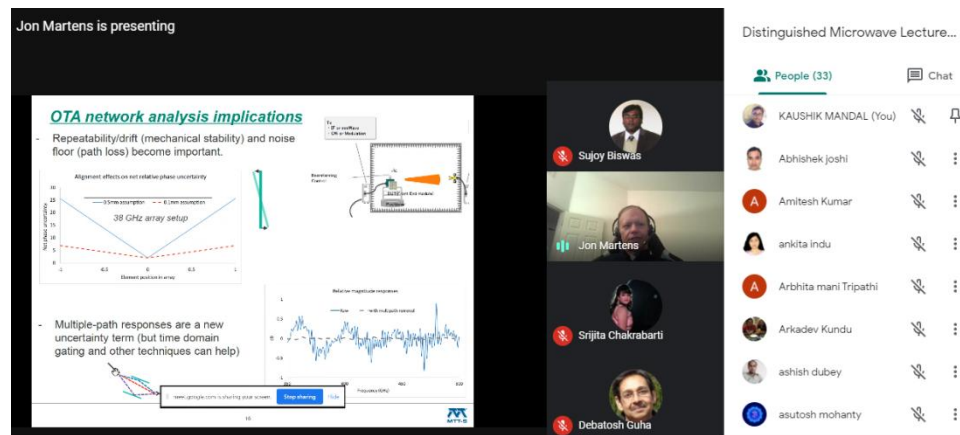
Lecture Meeting Program was organized by the IEEE AP/MTT Joint Chapter on 10<sup>th</sup> March, 2021 at SAMEER, Kolkata (also on Google meet online platform). The distinguished speaker Dr. P. H. Rao, Scientist, SAMEER Chennai, had delivered his lecture on *“Indigenous 5G End to End Test Bed: Technology and Challenges”*. The speaker highlighted on the recent development and challenges in 5G technology. It was highly enriching experience for the attendees. The event was attended by faculty members, research scholars and graduate students. The program was attended by 38 attendees.





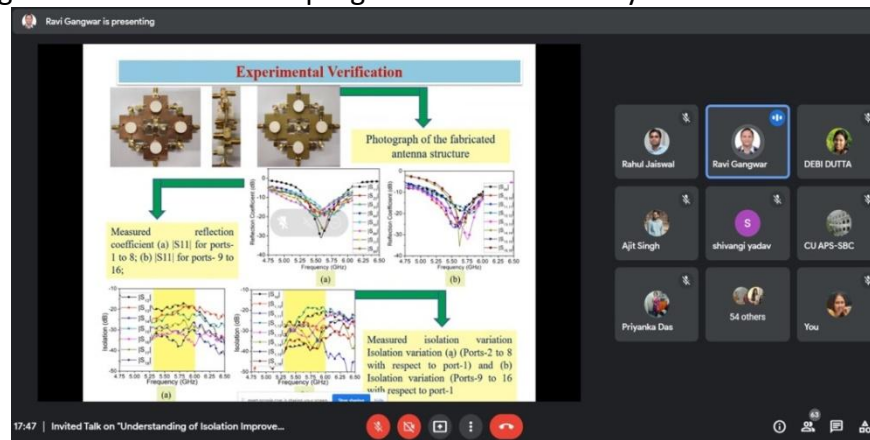
- Lecture meeting on 30<sup>th</sup> April, 2021**

The Lecture Meeting Program was organized by the IEEE AP/MTT Joint Chapter on 30<sup>th</sup> April, 2021 on Google meet online platform. The distinguished speaker Dr. Jon Martens, Engineering Fellow, Anritsu, USA, had delivered his lecture on “*What is my measurement equipment actually doing? Implications for 5G/6G, mm-wave and related applications*”. The speaker highlighted the required measurement equipment for 5G/6G and mm-wave related designs. This lecture was really fruitful for all the attendees. The event was attended by faculty members, research scholars, and graduate students. The program was attended by 40 attendees.



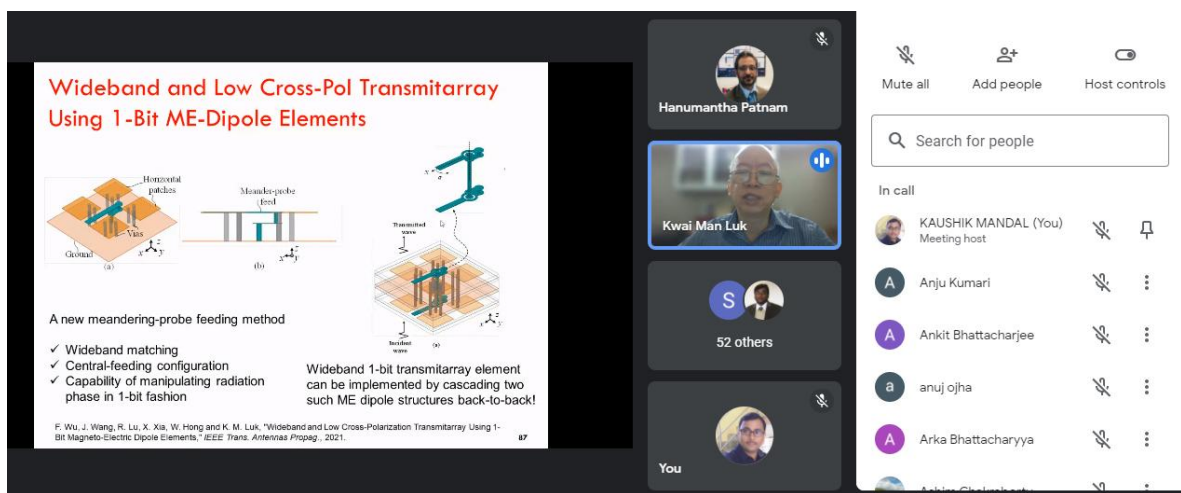
- Lecture meeting on 12<sup>th</sup> July, 2021**

The lecture meeting program was organized by the IEEE AP/MTT Joint Chapter in association with IEEE AP-S Student Branch University of Calcutta, on 12<sup>th</sup> July, 2021 on Google meet online platform. The distinguished speaker Dr. Ravi Kumar Gangwar, Indian Institute of Technology, (ISM) Dhanbad, had delivered his lecture on “*Understanding of Isolation Improvement in MIMO Antenna System*”. The speaker starts his talk with the very basics of MIMO antenna and ends with the present challenges in MIMO antenna design for 5G applications. It was a highly enriching experience for the attendees. The event was attended by faculty members, research scholars, and graduate students. The program was attended by 50 attendees.



- **Lecture meeting on 25<sup>th</sup> September, 2021**

The lecture meeting program was organized by the IEEE AP/MTT Joint Chapter on 25<sup>th</sup> September 2021 on Google meet online platform. The distinguished speaker Prof. Kwai Man Luk, Chair Professor, Department of Electrical Engineering, City University of Hong Kong, had delivered his lecture on “*Magneto-electric Dipole Antennas – Recent Development and Future Directions and Related Applications*”. The speaker highlighted the recent development and future directions of the magneto-electric dipole antenna. The speaker delighted all the attendees with his different industry-based antenna structures. This lecture was really fruitful for all the attendees. The event was attended by faculty members, research scholars, and graduate students. The program was attended by 66 attendees.



## **Part D – Social Activities**

(Award Ceremony, Family oriented or Team Building Activities, Social Events)

No social event was organized this year in view of the Covid-19 pandemic situation.