

# **IEEE STUDENT BRANCH OF NETAJI SUBHASH ENGINEERING COLLEGE**

## **Office Bearers**

Student Branch Chair: Nikhil Nandan

Treasurer: Debaditya Sen

Branch Counselor: Prof. Koushik Dutta

## **Student Branch Details**

Student Branch Code: STB15115

School Code: 60020578

Total No of IEEE Student Members: 29

No of Branch Chapters: 10

## **List of Student Branch Chapters**

### **1. Antennas and Propagation Society Student Branch Chapter**

Geo Code: SBC15115B

Student Branch Chapter Chair: Debaditya Sen

Branch Chapter Advisor: Prof. Koushik Dutta

Total No. of Student Members: 9



### **2. Computer Society Student Branch Chapter**

Geo Code: SBC15115E

Student Branch Chapter Chair: xxxxxxxxxxxx

Branch Chapter Advisor: Prof. (Dr.) Anupam Ghosh

Total No. of Student Members: 6



### 3. Computational Intelligence Society Student Branch Chapter

Geo Code: SBC15115A

Student Branch Chapter Chair: xxxxxxxxxx

Branch Chapter Advisor: Prof. (Dr.) Anupam Ghosh



Total No. of Student Members: 8

### 4. Society on Social Implications of Technology Student Branch Chapter

Geo Code: SBC15115C

Student Branch Chapter Chair: xxxxxxxxxxxxxx

Branch Chapter Advisor: Prof. (Dr.) Anupam Ghosh



Total No. of Student Members: 12

### 5. Robotics and Automation Society Student Branch Chapter

Geo Code: SBC15115D

Student Branch Chapter Chair: xxxxxxxxxx

Branch Chapter Advisor: Prof. Prithwish Das



Total No. of Student Members: 8

### 6. Medicine and Biology Society Student Branch Chapter

Geo Code: SBC15115H

Student Branch Chapter Chair: xxxxxxxxxxxxxx

Branch Chapter Advisor: Prof. (Dr.) Sukumar Roy



Total No. of Student Members: 7

### 7. Signal Processing Society Student Branch Chapter

Geo Code: SBC15115F

Student Branch Chapter Chair: xxxxxxxxxxxxxx

Branch Chapter Advisor: Prof. Tridibesh Nag



Total No. of Student Members: 6

### **8. Dielectric and Electrical Insulation Society Student Branch Chapter**

Geo Code: SBC15115G

Student Branch Chapter Chair: xxxxxxxxxxxx

Branch Chapter Advisor: Prof. Subrata Biswas

Total No. of Student Members: 8



### **9. Electron Device Society (EDS) Student Branch Chapter**

Geo Code: SBC15115H

Student Branch Chapter Chair: Ayush Thakur

Branch Chapter Advisor: Prof. Saheli Sarkhel

Total No. of Student Members: 10



### **10. Geoscience and Remote Sensing Society Student Branch Chapter**

Geo Code: SBC15115I

Student Branch Chapter Chair: Prasant Kashyap

Branch Chapter Advisor: Prof. Arijit De

Total No. of Student Members: 6



**List of IEEE Professional Members  
Netaji Subhash Engineering College**

Sl. No	Name of the Faculty	Affiliation	Department	IEEE Member ID	Society name(s)	Phone No	Email ID
1	Koushik Dutta	NSEC	ECE	92160913	AP	+919433229050	koushikdutt@yahoo.co.in
2	C. J. C. Singh	NSEC	ECE	93859345	EDS	+919836303819	cjclementsingh@gmail.com
3	Chiraranjan Datta	NSEC	ECE	90314261	COMSOC	+919831223897	crdatta@gmail.com
4	Abhijit Mitra	NSEC	ECE				mitra.ece@gmail.com
5	Swagata Chatterjee	NSEC	ECE		COMSOC	+919433152426	rctswagata@gmail.com
6	Dilip Kumar Mitra	NSEC	ECE		COMSOC	+919433092230	dkmitra5252@yahoo.co.in
7	Anirban Karmakar	NSEC	ECE	92228939	AP	+919231997302	anirban.ece@gmail.com
8	Anindita Sarkar	NSEC	ECE	93907571	CS	+919830690195	aninditainraphel@gmail.com
9	Niladri Shekhar Mishra	NSEC	ECE	93922712	-	+919433135109	niladri.mishra@gmail.com
10	Arijit De	NSEC	ECE		GRSS		saheli.rarkhel@gmail.com
11	Saheli Sarkhel	NSEC	ECE	93324153	EDS	+919051045157	Saheli.sarkhel@gmail.com
12	Anuradha Saha	NSEC	ECE	93268002	SMC	+919831022387	anuradha.nsec@gmail.com
13	Anupam Ghosh	NSEC	CSE	93898913	CS, CIS	+919831837936	anupam.ghosh@rediffmail.com
14	Prithwish Das	NSEC	CSE		RAS	+919836155438	pkdhm@yahoo.com
15	Chandan Banerjee	NSEC	CSE		CS	+919830127266	chandanbanerjee1@gmail.com
17	Tridibesh Nag	NSEC	EE	93024842	PES, IES, SPS	+919831234264	tridibeshnag@gmail.com
18	Swapna Roy	NSEC	EE	92226485	PES, WIE	+919433144289	swapna2006@gmail.com
19	Sankhadip Saha	NSEC	EE			+919434539589	imsankhadip@gmail.com
20	Subrata Biswas	NSEC	EE	93986957	DEIS	+919831758852	subratab28@gmail.com
21	Sukumar Roy	NSEC	BME	93983229	EMB	+919674739636	sroybme@gmail.com



Speaker



Mr. Shouvik Sarkar

Technical Head Core Department  
Ardent Computech Pvt Ltd.

Two Days Workshop On

# ROBOTICS

Organized by IEEE Kolkata Section

*in association with*

Department of ECE and IEEE Student Branch of NSEC

(Sponsored by IEEE Region 10 and IEEE Kolkata Section)

**Venue:** ECE Seminar Room, Dept. of ECE,  
Netaji Subhash Engineering College

**Start time:** 08 Jun 2022 12:00 PM

**End time:** 09 Jun 2022 04:30 PM

**Attendance:** 50 (IEEE 20 and non-IEEE 30)





Robotics for Healthcare



### Speaker



**Mr. Arghya Ganguli**

Director-Capability Development  
Finace Education

## Two Days Workshop on **ROBOTICS & AI** (Phase II)

**Organized by IEEE Kolkata Section**  
in association with

**Department of ECE and IEEE Student Branch of NSEC**  
(Sponsored by IEEE Region 10 and IEEE Kolkata Section)

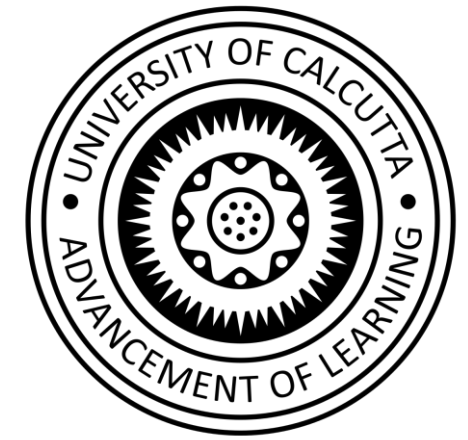


**Venue:** ECE Seminar Room, Dept. of ECE,  
Netaji Subhash Engineering College

**Start time:** 28 Jul 2022 12:00 AM

**End time:** 29 Jul 2022 04:30 PM

**Attendance:** 52 (IEEE 22 and non-IEEE 30)



Speaker



Shek Rafidul

Research Fellow  
University of Calcutta

# Hands-on Workshop on Advanced Antenna Design Organized by

IEEE AP-MTTs Kolkata Chapter

In Collaboration with

IEEE AP Student Branch Chapters of NSEC and CU

& Department of ECE, NSEC

**Venue:** ECE Seminar Room, Dept. of ECE,  
Netaji Subhash Engineering College

**Date:** 21st Nov 2022

**Time:** 11:00 AM to 04:00 PM

**Attendance:** 34 (IEEE 15 and non-IEEE 19)





IEEE AP/MTT Kolkata Chapter Presents

IEEE Lecture on

# Ultra-wideband Antenna Sub-Systems

Organized by

Dept. of ECE, Netaji Subhash Engineering College

In Collaboration with

IEEE AP Student Branch Chapters of NSEC and CU



**Ranadhir Chatterjee** (PhD IIT Kharagpur)  
Lead Engineer, HCL Technologies Pvt. Ltd.



**Venue:** ECE Seminar Room, Dept. of ECE,  
Netaji Subhash Engineering College

**Date:** 29<sup>th</sup> Nov 2022

**Time:** 1:00 PM to 02:30 PM

**Attendance:** 34 (IEEE 20 and non-IEEE 14)





## IEEE LECTURE ON 5G - A REALITY NOW

Organized by

IEEE AP-MTTs & IEEE COMSOC Kolkata Chapter

In association with

Netaji Subhash Engineering College, Dept. of ECE

Speaker



**Mr. Chanchal Chakraborty**

CEO, ATMI Private Limited

**Venue:** APC Hall, Netaji Subhash Engineering College

**Date:** 19<sup>th</sup> Dec 2022

**Time:** 1:30 PM to 02:30 PM

**Attendance:** 96 (IEEE 26 and non-IEEE 70)



**Student Branch Report 2023**  
**IEEE Student Branch, AP SBC, and MTT SBC**  
**Netaji Subhash Engineering College**

**Submitted by**  
**Anirban Chaterjee, Chair, IEEE SB NSEC, Kolkata**

**Chapter Officers 2023**

**Counselor:** Koushik Dutta

**Chair:** Anirban Chaterjee

**Secretary:** Utsa Purkayastha

**Vice-Chair(s):** Siddhartha Roy

**Treasurer:** Ankita Ghatak

**Activity Summary**

**Activity Summary 2023:**

**Total Non-Technical Meeting:** 5 (AGM+ 4 ExCom)

**Total Technical Events:** 15 (in-person)

**Download Detail Event Reports:** [Download](#)

**Download Brief Event Reports (ppt):** [Download](#)

**VTools Links for all Events in 2023:** [DOWNLOAD](#)

## Brief Reports on Technical Events

### Event 1:

**Event:** IEEE DL Talk

**Date:** Jan 5, 2023

**Time:** 3 PM to 5 PM

**Venue:** ETCE Seminar Hall, IEST, Shibpur, Howrah

**Attendance:** 35 (20 IEEE+ 15 non-IEEE)

**Speaker:** **Dr. Arun Bhattacharyya**, APS DL, RF Center of Excellence Lockheed Martin Space Systems Littleton, CO, USA

IEEE AP-MTTs Kolkata Chapter in association with IEEE AP SBC of Indian Institute of Engineering Science and Technology (IEST), Shibpur, IEEE AP SBC of Calcutta University and IEEE AP SBC of Netaji Subhash Engineering College jointly organized one-day IEEE lecture meeting on “Phased Array Antennas: Space Applications and Challenges” in the Seminar room of IEST, ECE department on 05.01.2023 from 3 PM to 5 PM. In the inaugural session of this event welcome speech offered by Dr. Susanta Kumar Parui (HOD, Department of Electronics & Tele Communications), followed by was, Dr. Koushik Dutta, Chair, IEEE AP-MTTs Kolkata Chapter and by our speaker Dr. Arun Bhattacharyya. As part of the inaugural session, several membership development activities were conducted by IEEE volunteers led by Dr Koushik Dutta. Dr. Arun Bhattacharyya provided a brief overview of the phased array antenna and its use in modern communications systems after the grand inauguration. In his description of the design criteria and challenges involved in the development of this technology, he goes into great detail. It created a huge interest among the attendees which comprised nearly 25 undergraduate students along with a group of 10 young scientists and faculty members (20 of them were IEEE AP-S members).



## **Event 2:**

**Event:** IEEE Global Microwave and Antenna Conclave

**Theme:** Scientific Advancements in High Frequency Engineering for a Connected World

**Mode:** Hybrid Mode

**Date:** 12th Jan 2023

**Time:** 9.30 AM to 5.30 PM

**Venue:** Seminar room, SAMEER Kolkata Centre, Block-GP, Salt Lake Electronics Complex, Sec-V, Kolkata

**Attendance:** 55 (35 IEEE+ 20 non-IEEE)

### **Speakers:**

1. **Dr. Nemai Chandra Karmakar**, Associate Professor, Department of Electrical and Computer Systems Engineering, Monash University, Australia
2. **Dr. P H Rao**, Director General, SAMEER, MeitY, Govt. of India
3. **Dr. Tapas Chakraborty**, Principal Scientist, TCS Research
4. **Dr. Arijit Majumder**, Officer-in-Charge, SAMEER Kolkata

IEEE AP-MTTs Kolkata Chapter organized a one-day workshop titled “IEEE Global Microwave and Antenna Conclave” in association with IEEE AP Student Branch Chapters of Netaji Subhash Engineering College and Calcutta University on 12th Jan 2023 from 9.30 AM to 5.30 PM. The resource persons for this event were Dr. Tapas Chakraborty, Dr. Arijit Majumder, Dr. Nemai Chandra Karmakar, and Dr. P. Hanumantha Rao. As part of their discussion, Dr. P. H. Rao discussed the current activities related to the upcoming 6G technology, including the challenges and special precautions required during the development process. In terms of communication systems, Dr Karmakar discusses upcoming technologies and the supporting systems necessary for adopting them. Dr. Majumdar discussed future technologies as well as various measurement facilities, their testing processes, and how they will fit into the current systems. Dr. Tapas Chakraborty discussed some new human radar technologies and their design challenges. Approximately 55 people (35 IEEE+ 20non-IEEE) attended the workshop, including IEEE members, students, young professionals, and faculty members.



### **Event 3:**

**Event:** Inauguration of MTT SBC of NSEC & 2 days' workshop (Microwave And Millimeter Wave Techniques: Current Trends and Future Directions)

**Date:** 11-12 April 2023

**Time:** 10 am - 5:00 pm

**Venue:** APC Hall, Netaji Subhash Engineering College, Technocity, Garia, Kolkata 700152.

**Attendance:** 55 (IEEE 35 and non-IEEE 25)

#### **Special Guests:**

1. **Prof. Nuno Borges Carvalho**, President, IEEE MTTs, Prof, Uni. of Aveiro, Portugal (online).
2. **Dr. Goutam Chattopadhyay**, Fellow IEEE, Chair, MTTs MGA, Sr. Scientist, NASA-JPL.
3. **Prof. Debatosh Guha**, Fellow IEEE, Professor, IRPE, CU, IEEE APS DL, Chair, APS MGA, & Chair, APS Meas. Com.
4. **Prof. Iti Saha Misra**, Chair, IEEE Kolkata Section, Professor, Jadavpur University.
5. **Dr. Chinmoy Saha**, IIST, Thiruvananthapuram, R10 Coordinator, IEEE MTTs.

#### **Speakers:**

1. **Dr. Mrinal Kanti Mandal**, Professor, IIT Kharagpur, Chair, IEEE Kharagpur Section.
2. **Dr. Debasis Mitra**, Associate Professor, IEST, Shibpur
3. **Sk. Rafidul**, Senior Research Scholar, University of Calcutta
4. **Dhruba Das**, Scientist, SAMEER, Kolkata
5. **Ms. Manisha K**, ANSYS CADFEM India Private Limited

The event started with the inauguration of the IEEE MTTs Student Branch Chapter (SBC) of Netaji Subhash Engineering College (NSEC) and a membership development program. A grand inauguration of IEEE MTT's SBC was held with the lighting of the lamp by Dr. Goutam Chattopadhyay, Prof. Iti Saha Misra, Prof. Debatosh Guha, Dr. Chinmoy Saha, and Dr. Mrinal Kanti Mandal. A welcome address was given by Dr. Koushik Dutta, chair, IEEE AP-MTTs Kolkata Chapter & Head, ECE, NSEC). Prof. Nuno Borges Carvalho, IEEE MTTs President, gave a video message followed by the welcome address of Prof. (Dr.) Amal Kumar Ghosh, Principal, NSEC and Prof. Sukumar Roy, Dean, NSEC. After that, Prof. Iti Saha Misra, Prof. Debatosh Guha, and Dr. Chinmoy Saha addressed the students with their valuable messages. Dr. Goutam Chattopadhyay, the chief guest of our event, then addressed the gathering with a motivational speech. The benefits and opportunities available to IEEE members were discussed. Additionally, he discussed various funding and fellowship opportunities for SBs and SBCs. In addition to reimbursement of memberships for participants with IEEE AP and MTT memberships, there was a special gift for each participant.

After the grand inauguration, Dr. Mrinal Kanti Mandal delivered a lecture to kick off the technical session of the workshop. The industry session was conducted online by Ms. Manisha K of ANSYS CADFEM India Private Ltd. and her team. Sk Rafidul conducted hands-on sessions I and II on both days of the workshop. On day two, Dr. Debasis Mitra and Mr. Dhruba Das were invited to deliver two lectures respectively. In their presentations, they share their practical experience in the design of microwave and millimetre-wave systems. Resource persons interacted actively with participants and provided theoretical knowledge combined with hands-on activities.



#### **Event 4:**

**Event:** Two Days IEEE Workshop SYNCLIPSE 2023

**Title:** SYNCLIPSE 2023

**Speakers:** from industries and academia

**Date:** 12<sup>th</sup> and 13<sup>th</sup> May 2023

**Time:** 10:00 AM - 5:30 PM (IST)

**Venue:** APC Hall, Netaji Subhash Engineering College

**Attendance:** 85 (20 IEEE + 65 non-IEEE)

Netaji Subhash Engineering College (NSEC), Kolkata has organized a two-day technical program “SYNCLIPSE 2023” on 12<sup>th</sup> and 13<sup>th</sup> May 2023 on the college premises. The initiative has been taken by the Department of Computer Science and Business Systems (CSBS) for developing a global acumen among the students. The event was technically sponsored by IEEE AP-MTTs Kolkata Chapter. The program began with a message from the Guest of Honour, Mr Satyam Roychowdhury (MD, TIG) and was followed by another message from Mr Sanku Bose (GCEO, TIG). The Patron of SYNCLIPSE 2023, Dr. Hrishikesh Mandal (Director, NSEC) inaugurated the program with a welcome speech and by lighting the lamps along with all the invited dignitaries and in-house Chairpersons. The prime focus of the program was the seven compelling talks

delivered by eminent speakers and industry experts in various fields. The other noteworthy attraction of the program included a spectacular theme-based cultural program performed by the students of the institute. The General Chair of SYNCLIPSE 2023, Prof. (Dr.) Amal Kumar Ghosh addressed the participants regarding the future scopes. The program has received a huge response in social media, such as Facebook, Instagram and even LinkedIn and turned out to be one of the most popular events of 2023. The program concluded with a vote of thanks delivered by the Organizing Chair, Prof. (Dr.) Anirban Kundu (HoD, CSBS).

Resource persons for the SYNCLIPSE 2023:

Mr. Anup Roychowdhury, Documentary Film Maker and Writer, The Ramakrishna Mission Institute of Culture, Golpark

Mr. Gurpreet Singh, Sergeant, Indian Air Force, NCC

Mr. Dadan Prasad, Junior Warrant Officer, Indian Air Force, NCC

Mrs. Mina Desai, Joint Director & Head of Emerging Technologies Group(ETG), C-DAC

Dr Arpita Sen, Innovation Evangelist of TCS Research & Innovation, TCS

Mr. Partha Sarkar, Regional Head, TCS Academic Interface Program, TCS

Mr. Anurag Kirti, HR Head (Eastern Zone), Wipro

Mr. Abhijit Ray, Chief Technology Officer, Digiboxx

Mr. Mukesh Singh, IT Head, Digiboxx

Mr. Ayan Bandyopadhyay, Associate Director – IOA, Cognizant

Prof. (Dr.) Soumen Banerjee, Senior Member-IEEE & IEEE-AP Society, Fellow-IETE

Mr. Ritabrata Moitra, MLOps specialist, Sixt Research and Development India

Mr. Rajesh Sarkar, AGM, NALCO

Mr. Bimal Mandal, Senior Advisory SAP Consultant, IBM

Mr. Rajmohan De Sarkar, Director, Ardent Computech Pvt. Ltd.

Mr. Debabrata Ghosh, Marine engineer, Transworld Ship Management Pvt. Ltd.



## **Event 5:**

**Event:** IEEE Distinguished Lecture (APS DL)

**Title:** Overview of Electromagnetic Selective Structures

**Speaker:** Prof. Zhongxiang Shen, APS DL, School of Electrical and Electronic Engineering Nanyang Technological University, Singapore

**Date:** May 18, 2023

**Time:** 10:00 AM - 1:00 PM (IST)

**Attendance:** 48 (16 IEEE +32 non-IEEE)

A Distinguished lecture event on "Overview of Electromagnetic Selective Structures" was successfully hosted by IEST, Shibpur ETCE department at ETCE seminar hall IEST, Shibpur in association with the IEEE AP & MTTs SBC of IEST, NSEC, and CU on May 18, 2023. The presentation is delivered by Prof. Zhongxiang Shen, APS DL, from the School of Electrical and Electronic Engineering Nanyang Technological University, Singapore. The lecture was exciting and full of participation from everyone who attended. Prof. Susanta Kumar Parui and the IEST volunteer team are to be commended for their assistance in ensuring the success of the event in person mode. Some photographic memories have been shared here.



## **Event 6:**

**Event:** Industrial Visit

**Date:** 28<sup>th</sup> Aug, 2023

**Time:** 10.00AM to 5.00 PM (IST)

**Venue:** Doordarshan Kendra, Kolkata

**Attendance:** 15 (15 IEEE)

Netaji Subhash Engineering College's Department of ECE arranged a one-day visit to Doordarshan for its B.Tech 3rd and 4th year IEEE students on August 28, 2023. Among the accompanying faculty was Dr. Koushik Dutta, Head of the ECE Department and Chair of the Kolkata Section. The students were shown the studios and were given explanations for its way of functioning and designs. Industrial visits are a vital part of any professional course where students are exposed industries of their field. Doordarshan, for any media student, would be a prominent area of interest because it was the first channel of Indian television and hence have seen the evolution of Indian media. This visit has been very enlightening. The students were divided into four groups, each guided by a representative of DD. The students were taken around the Art Station Room, PVR Room, Studio and the Editing Room. They were briefly explained how the videos are shot, synchronized by audio, edited, uplinked to the satellite and downlinked and distributed as programmes to the houses of viewers. The machines and it's technicalities in each room were discussed concisely. The students spent 3-4 hours studying and assimilating valuable information.



## **Event 7:**

**Event:** IEEE Advanced School of Antennas (International Workshop)

**Speaker:** 1. Paolo Rocca, ELEDIA Research Center, University of Trento, Italy.

2. Bo Liu, University of Glasgow, UK.

3. Mobayode Akinsolu, Wrexham Glyndwr University, UK.

4. Mr. Sourabh Joshi, MathWorks

**Date:** June 22-24, 2023

**Venue:** KIIT University, Bhubaneswar, India

**Attendance:** 70 (58 IEEE + 12 non-IEEE)

IEEE AP/MTT-s Kolkata chapter and the School of Electronics Engineering, KIIT University, Bhubaneswar jointly organized a summer school cum workshop Advanced School of Antennas (ASA) on AI and ML in Antenna Engineering during June 22-24, 2023. This was the 4th edition of ASA and was sponsored by the IEEE APS Membership and Geographic Activities Committee. The event brought together experts, professionals, and learners from the field of antenna engineering to explore the applications and advancements of Artificial Intelligence (AI) and Machine Learning (ML) with an objective to give basic level ideas of AI and ML in antenna design, optimization, and performance analysis. Total 70 numbers of participants joined all over the India ranging from undergraduate to research scholar and university faculty members. Most of them (95%) were the IEEE AP-S members. The experts and mentors were from leading universities and industries such as Italy, UK, and USA. Day 1 started with registration and was followed by welcome address by the ASA founder Prof. Debatosh Guha, India. Prof. Paolo Rocca, ELEDIA Research Centre, University of Trento, Italy, Prof. Bo Liu, University of Glasgow, UK, and Prof. Mobayode Akinsolu, Wrexham Glyndwr University, UK are among the presenters in the technical session. Prof. Rocca was present in-person whilst the other speakers were in virtual mode. The inaugural ceremony was held in the evening followed by a cultural program and banquet dinner. Prof. Suprava Patnaik, Dean School of Electronics Engineering, KIIT university delivered the welcome address. Prof. J. R. Mohanty, Registrar, Prof. A. K. Sen, Chairman, Prof. Debatosh Guha, Course director, local coordinator Prof. Sudhakar Sahu, and Dr. Koushik Dutta, Chair, IEEE AP/MTT-S were also present. Day 2 featured technical sessions along with MATLAB hands on training. A special attraction was visit to Konark and Puri sightseeing. Interactive Session discussions. A special session was conducted by Debatosh Guha, Chair of IEEE AP-S MGA committee which created huge interest among the participants.

The objective of the program was to stimulate learner's curiosity in combining traditional antenna engineering with recently developed AI and ML techniques. The course was meant to progress from beginner to the advanced level. The list of talk as follows:

- 1.Introduction to ML and optimization (part-I & II) & MATLAB exercises in ML and optimization by Paolo Rocca, ELEDIA Research Center, University of Trento, Italy.
- 2.The concepts of AI-driven antenna design methodologies by Bo Liu, University of Glasgow, UK.
- 3.Implementing AI-driven Antenna Design: Step-by-step Tutorial & Challenging Antenna Cases Solved by AI-driven design by Mobayode Akinsolu, Wrexham Glyndwr University, UK.
- 4.MATLAB Antenna Toolbox: an interactive AI-driven antenna design environment by Mr. Sourabh Joshi, MathWorks

All participants were served buffet lunch, dinner and tea/coffee all the days of the event.. Outstation all AP-S members and student members were provided free accommodations in KIIT Guesthouse and scholar's hostel. Prof. Debatosh Guha, AP-S MGA Chair, convened the programme, and it was coordinated by Prof. Sudhakar Sahu, Professor, KIIT University, Ms. Debi Dutta, and Sk Rafidul, IEEE AP-S volunteer. There were a number of AP-S student members from both the University of Calcutta and the KIIT University who actively volunteered throughout the program.

The event successfully concluded on 24th June and fostered collaborations and knowledge sharing among professionals and researchers in the field. The participants left the event with a deeper understanding of the applications of AI and ML in antenna engineering and were inspired to explore further advancements in this rapidly evolving domain.





### **Event 8:**

**Event:** Membership Development & Seminar

**Speaker:** Dr. Koushik Dutta, Chair Kolkata section and advisor of NSEC student branch chapter.

**Date:** 4<sup>th</sup> Aug ,2023

**Time:** 3:30 PM (IST)

**Venue:** ECE Department, 3<sup>rd</sup> year classroom

**Attendance:** 62 (10 IEEE + 52 non-IEEE)

The Netaji Subhash Engineering College Student Branch Chapter (NSEC-SBC) organized a membership development programme at the Electronics and Communication Engineering Department, 3rd year class room on 4th August, 2023. NSEC student branch advisor and Chair Kolkata section, Dr. Koushik Dutta opened this program. In his presentation, Dr. Dutta described the benefits of participating in an IEEE Student Branch, which offers opportunities to meet and learn from other IEEE Student and Graduate Student members in the area, as well as to engage with professional IEEE members. With IEEE Student membership, you can apply for travel grants, scholarships, awards, and much more. You'll be able to advance to the next level with all this support. At that programme, the Chair of the AP/MTTs student branch, the Chair of the MTTs student branch, and other members were present. All of them spoke about how IEEE has benefited them. There is a lot of excitement among the students, and they actively participate with their questions.



### **Event 9:**

**Event:** Membership Development & Seminar

**Speaker:** Dr. Koushik Dutta, Chair Kolkata section and advisor of NSEC student branch chapter.

**Date:** 16<sup>th</sup> Aug, 2023

**Time:** 10.00 AM (IST)

**Venue:** ECE Dept., 1st year classroom

**Attendance:** 60 (10 IEEE + 50 non-IEEE)

The Netaji Subhash Engineering College Student Branch Chapter (NSEC-SBC) organized a membership development programme at the Electronics and Communication Engineering Department, 1st year class room on 16<sup>th</sup> August, 2023. The program was opened by Dr. Koushik Dutta, advisor of NSEC student branch and chair of Kolkata section. He described the many benefits of being a member of an IEEE Student Branch, including meeting other IEEE Students and Graduate Students and engaging with IEEE professionals. What grants, scholarships, awards, and more are available to IEEE Student members.



### **Event 10:**

**Event:** Membership Development & Seminar

**Speaker:** Dr. Koushik Dutta, Chair Kolkata section and advisor of NSEC student branch chapter.

**Date:** 17<sup>th</sup> Aug ,2023

**Time:** 10.00 AM (IST)

**Venue:** ECE Dept., 1st year classroom

**Attendance:** 57 (9 IEEE + 48 non-IEEE)

The Netaji Subhash Engineering College Student Branch Chapter (NSEC-SBC) organized a membership development programme at the Electronics and Communication Engineering Department, 1st year classroom on 17<sup>th</sup> August 2023. The program was opened by Dr. Koushik Dutta, advisor of NSEC student branch and chair of Kolkata section. Dr. Dutta described the benefits of being a member of an IEEE Student Branch, which allows you to meet and learn from other IEEE Student and Graduate Student members in your area, as well as engage with IEEE professionals. As an IEEE Student membership, they can apply for various grants, scholarships, awards, and much more. The AP/MTTs student branch members and the MTTs student branch members attended that event. Students are excited and participate actively with their questions. First come, first served, the new membership amount was reimbursed. In the later stages of membership development, these types of programs were conducted.



### **Event 11:**

**Event:** IEEE lecture meeting & membership development

**Date:** 18<sup>th</sup> Aug 2023

**Time:** 3:30 PM (IST)

**Venue:** ECE Dept., 2<sup>nd</sup> year classroom

**Attendance:** 59 (9 IEEE + 50 non-IEEE)

IEEE meeting was held at the 2nd year classroom of the Electronics and Communication Engineering Department on 18th August by Netaji Subhash Engineering College Student Branch Chapter (NSEC-SBC). An NSEC SBC meeting was called to discuss upcoming events. In this discussion, all members actively participated.



### **Event 12:**

**Event:** Engineers' Day Celebration

**Date:** 15<sup>th</sup> Sept., 2023

**Time:** 10.00AM to 2.00 PM (IST)

**Venue:** APC Hall, Netaji Subhash Engineering College

**Attendance:** 70 attendees (40 IEEE+ 30 non-IEEE)



### **Event 13:**

**Event:** IEEE APS Distinguished Lecturer (APS DL) Talk

**Title:** Can perfectly electric conducting obstacles modify the permeability of metamaterial?

**Date:** 10 October 2023 (Tuesday)

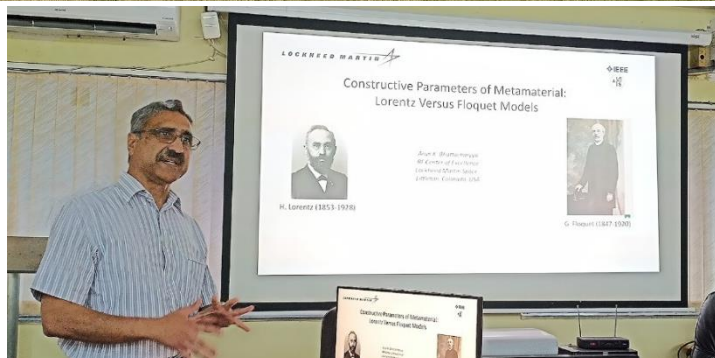
**Time:** 3 PM to 4 PM

**Venue:** SAMEER Kolkata Centre, Salt Lake Electronics Complex, Kolkata-700091

**Attendance:** 40

**Speaker:** Dr. Arun Bhattacharyya, RF Center of Excellence Lockheed Martin Space Systems Littleton, CO, USA

IEEE AP-MTTs Kolkata Chapter in association with IEEE AP/MTTs SBC of Indian Institute of Engineering Science and Technology (IEST), Shibpur, IEEE AP/MTTs SBC of Calcutta University and IEEE AP/MTTs SBC of Netaji Subhash Engineering College jointly organized IEEE AP-S Distinguished Lecturer (DL) Talk On “Can perfectly electric conducting obstacles modify the permeability of metamaterial?” by Dr. Arun Bhattacharyya, RF Center of Excellence Lockheed Martin Space Systems Littleton, CO, USA at SAMEER Kolkata Centre, Salt Lake Electronics Complex, Kolkata-700091 on 10th October, 2023 at 3pm to 4pm. In the inaugural session of this event welcome speech offered by Dr. Koushik Dutta, Chair, IEEE AP-MTTs Kolkata Chapter and by our speaker Dr. Arun Bhattacharyya. As part of the inaugural session, several membership development activities were conducted by IEEE volunteers led by Dr Koushik Dutta. Dr. Arun Bhattacharyya provided a brief overview of metamaterials, which can be designed using conducting materials, but they have a very different property from conducting materials. It is explained in detail how the characteristics of metamaterials are integral part of a modern communication system.



### **Event 14:**

**Event:** Education Excursion and Industrial Visit

**Venue:** IIT Kharagpur, Salua Air force Radar station

**Date:** 11-12 Oct, 2023

**Attendance:** 25

An education excursion and an industrial visit to IIT Kharagpur, DRDO Chandipur, and Salua Air Force Radar station was organized for BTech 3rd and 4th year IEEE members at no cost by the Department of ECE of Netaji Subhash Engineering

College on 11-12 October 2023. There were several faculty members accompanying the students, including Dr. Koushik Dutta, HOD of the ECE Department, Mr. Tapash Dawn, and Mr. Anirban Chatterjee. Students visited antenna practical measurement sites and were shown how measurements are carried out by research scholars at KGP's IIT. Dr. Mrinal Kanti Mandal, Asso. Professor, IIT Kharagpur, demonstrated the theory behind each device. A variety of measuring instruments is demonstrated after his session, along with a prototype antenna that has been fabricated. IEEE IIT student chapters and NSEC students interact, sharing ideas, and enjoying lunch on the same campus.



## **Event 15:**

**Event:** IEEE Talk

**Title:** Mobile Satellite Communications for Humanitarian Assistance

**Mode:** In person

**Organized by:** IEEE AP/MTTs Kolkata Chapter

**In association with:** IEEE AP and MTTs Student Branch Chapters of CU and NSEC

**Date:** 27th Dec 2023

**Time:** 3.30 PM

**Venue:** Seminar room, SAMEER Kolkata Centre, Block-GP, Salt Lake Electronics Complex, Sec-V, Kolkata

**Attendance:** 38 (32 IEEE+ 4 non-IEEE)

**Speakers:** Dr. Nemai Chandra Karmakar, Associate Professor, Department of Electrical and Computer Systems Engineering, Monash University, Australia

IEEE AP-MTTs Kolkata Chapter organized an IEEE Talk on “Mobile Satellite Communications for Humanitarian Assistance” in association with IEEE AP and MTTs Student Branch Chapters of Netaji Subhash Engineering College and Calcutta University on 27th Dec 2023 from 3.30 PM. The resource person for this event is Dr. Nemai Chandra Karmakar.

