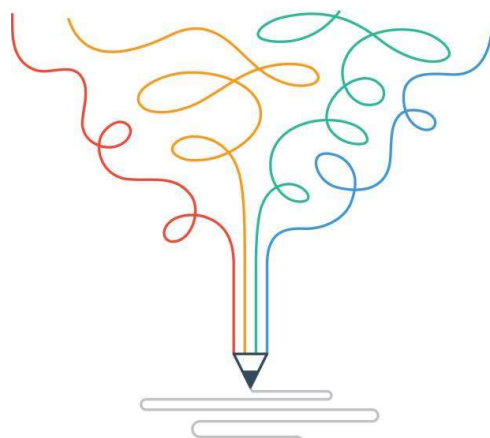Geo code R00137

IEEE KOLKATA SECTION

SECRETARY'S REPORT 2022

IEEE
KOLKATA SECTION

PART A
SECTION SUMMARY

A.1 Executive Summary

- **Felicitation of Padma Shri Prof. Sanghamitra Bandyopadhyay and Sir J.C. Bose Milestone Lecture**

IEEE Kolkata Section jointly with the Department of Electrical Engineering, Jadavpur University took the privilege to felicitate Padma Shri Prof. Sanghamitra Bandyopadhyay, Director, Indian Statistical Institute, Kolkata, India. After the felicitation Program, the prestigious "Sir J.C. Bose Milestone Lecture was delivered by Prof. Sanghamitra Bandyopadhyay on "Harnessing Artificial Intelligence for Healthcare Solutions". The Milestone Lecture ended at 7:30 p.m. after which a social interaction and networking dinner was organized at Mainland China, South City Mall. Finally, the event ended at 10:30 p.m. with the wholehearted satisfaction of the IEEE members for being a part of this great physical event after such a long COVID break.

Total Number of Participants: 75

- **Sir C.V. Raman Milestone Lecture**

IEEE Kolkata Section organized "Sir CV Raman Milestone Lecture" virtually on July 26, 2022 at 5:00 pm. This Milestone Lecture was delivered by Dr. Ranjan K. Mallik, Institute Chair Professor and J.C. Bose Fellow, Department of Electrical Engineering, Indian Institute of Technology Delhi, India, on "Channel Capacity of Asymmetric Constellations in Rayleigh Fading with Non-coherent and Coherent Detection". After this lecture, a sumptuous dinner was organized at "The Pavilion", Calcutta Club from 7:00 pm for social interaction and networking amongst the IEEE members which finally ended at 10:30 pm.

Total Number of Participants: 35

- **Workshop on Curriculum Development for Accreditation**

Advancement of technologies in various area demands its incorporation in the existing curriculum in engineering field. In order to identify and discuss about the recent development in science and technology area, a 2-day workshop was conducted. In the workshop, the experts from various areas of science and technology were invited. A detailed discussion was held in the workshop to identify the recent development of science and technology.

Total Number of Participants: 32.

- **Proyog – 2022**

It was a project competition for young and originative generation (mostly pre-university students), held on 20-21 October, 2022. It was organized by Educational Activity Sub-committee and was funded by R10.

- The Industry-Academia Dialogue Forum of IEEE Kolkata Section jointly with Power & Energy Society Kolkata Chapter organized a workshop on "**E-VEHICLE: Research opportunity with Industry-Academia collaboration**" on 18th May, 2022 from 3:00 PM in virtual platform.
Total participants were 65.

- The Industry-Academia Dialogue Forum of IEEE Kolkata Section conducted a one-day plant visit to the state of the art thermal power station of **Haldia Energy Limited** on 19 July 2022. The workshop is a step in the Net-Zero journeys and is focused on industry-academia collaboration to identify research areas and innovation in carbon footprint reduction.
Total participants were 24.

- **IEEE Kolkata Section's flagship conference, CALCON 2022** was organized by on 10th and 11th December 2022 at **Jadavpur University Campus**. The event was inaugurated on 10th December 2022 at 9:30 am.

The Inauguration Ceremony was attended by **Prof. Saifur Rahman**, Director, Virginia Tech Advanced Research Institute, USA; President, IEEE Power & Energy Society, 2018 and 2019; 2022 IEEE President-elect and **Mr. Rabi Chowdhury**, Managing Director (Generation) CESC Ltd.

Total 152 papers were sent for review and after review 70 papers were accepted. Total 66 authors registered for the conference. Out of these 66 papers, 50 papers were presented in 12 parallel sessions organized on 10th and 11th December. The paper presentation sessions were held in Dr. Triguna Sen Memorial Auditorium, K. P. Basu Memorial Auditorium and TEQIP building of Jadavpur University. Other 16 papers were presented online. The online session was organized in the Seminar Room of the Electrical Engineering building on 10th December.

Three key-note speeches were organized during the conference.
- o Prof. Rahaman delivered a lecture on "The Existential Threat of Climate Change: How Should We Respond?"
- o **Prof. Neelesh B Mehta** of IISc. Bangalore, delivered a lecture on "Interference-Aware Design of 5G and Beyond Cellular Communication Systems"
- o **Prof. Sandeep K Shukla** of IIT Kanpur, delivered a lecture on "Cyber Security of Cyber Physical Systems: A C3iHub Perspective"

WIE affinity group of IEEE Kolkata Section organized a lively panel discussion on "Discrimination against Women- Is it a Myth?" on 10th December 2022 from 3:30 pm.

Industry Relation subcommittee of IEEE Kolkata Section organized a panel discussion attended by representatives of Power Grid and CESC Ltd.

The conference was sponsored by Power Grid, CESC Ltd, Exide, Secure Meters and Iskraemeco.

List of Section Officer and Executive Committee Members

Office Bearers

Sushmita Mitra	Chair
Iti Saha Misra	Chair-Elect
Suparna Kar Chowdhury	Vice-Chair
Susanta Ray	Secretary
Tridibesh Nag	Treasurer
Sanjay Kar Chowdhury	Immediate Past Chair

Members

1. Bhaskar Gupta
2. Sovan Dalai
3. Sayan Chatterjee
4. Koushik Dutta
5. Sarmistha Neogy
6. Sudeshna Choudhury
7. Nilanjan Chakrabarti
8. Sudipta Chattopadhyay
9. Atanu Kundu
10. Mousiki Kar
11. Subhadip Basu
12. Arpan Pradhan
13. Ardhendu Kundu

Members	Elected Officials
Koushik Dutta	Chair AP-MTTS Chapter
Saradindu Panda	Chair CAS Chapter
Tandra Pal	Chair CIS Chapter
Prof. Sarbani Roy	Chair Computer Chapter
Subhamoy Chakraborti	Chair COMSOC Chapter
Chiranjib Koley	Chair DEIS Chapter
Manash Chanda	Chair EDS Chapter
Susmita Ghosh	Chair GRSS Chapter
S K Biswas	Chair IAS Chapter
Susanta Ray	Chair PES Chapter
Ms.Shampa Guin	Chair Photonics Chapter
Chintan Kumar Mandal	Chair YP Affinity Group
Sudeshna Choudhuri	Chair WIE Affinity Group
Mousiki Kar	Chair SIGHT Affinity Group
Kaushik Das Sharma	Chair CSS-IMS Chapter
Sagar Mukherjee	Chair SSC Chapter
Sovan Dalai	Chair Signal Processing Chapter
Srinivas Karanki	Chair Power Electronics Society Joint Section Chapter
H. K. Ratha	Chair COMSOC Computer Joint Society Chapter
T. R. Lenka, NIT Silchar	Chair Nanotechnology Council Chapter
Sudhir Kumar	Chair Patna Sub-section
S Samantaray	Chair Bhubaneswar Sub-section
Kamalakanta Mahapatra	Chair Rourkela Sub-section
Sukumar Nandi	Chair Guwahati Sub-Section
Taimoor Khan	Chair Silchar Subsection

A.2 Financial Report

Summary:

- Opening balance as on 1st January 2022 was Rs.1,06,14996.59.
- The closing balance as on 31st December 2022 was Rs.1,24,55902.43

PART B
ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- IEEE Kolkata Section Membership Development Committee (MDC) in association with IEEE EDS NIT Silchar Student Branch Chapter, Assam, and IEEE Kolkata Section Nanotechnology Council Chapter organized membership drive on **18th February, 28th May and 23rd December, 2022** at NIT Silchar through hybrid mode.

- IEEE Kolkata Section Membership Development Committee (MDC) and IEEE WIE AG Bhubaneswar organized a lecture talk on "**Role of IEEE in Enhancement of Engineering Career**" on **17th September**, 2022 to celebrate Engineers' Day and Vishwakarma Jayanti.

- IEEE Kolkata Section Membership Development Committee (MDC) in association with **IEEE Student Branch, IIT Indore,** organized a membership drive program on **5th February 2022.**

Section Membership (Including subsections)	IEEE Grades		
		Associate Member	20
		Fellow	9
		Graduate Student	962
		Life Fellow	3
		Life Member	36
		Life Senior	176
		Member	1453
		Senior Member	831
		Student Member	354
	Other Grades	Affiliate	17
	Total		3843

It was 3667 in the previous year.

> ♣ **Membership Growth of the Section is 1.2% in the year 2022.**

B.2. Chapter Activities

Total Active Chapters: 18

SUMMARY OF ACTIVITIES OF CHAPTERS

AP/MTT

- IEEE AP/MTT-s Kolkata Chapter took an initiative under **IEEE APS COPE** project for underprivileged school students in creating a virtual classroom facility at a government-sponsored school at **Raiganj, Uttar Dinajpur**. The total funding amount for this project was **1000 USD**. Dr. Sujoy Biswas, former chair of IEEE AP/MTT-s Kolkata Chapter, initiated the process in 2021 and this has been executed by the current chair Dr. Koushik Dutta.
- IEEE AP-S Antenna Measurement Committee in association with IEEE AP/MTT Kolkata Chapter and KIIT-Deemed to be University, successfully organized a **two-day (June 3-4, 2022) workshop event "Advanced School of Antennas 2022"** in the School of Electronics Engineering, KIIT-DU, Bhubaneswar.

CASS

- IEEE CAS Kolkata Chapter organized a **Circuit Design Contest ELEKTRON**, under Techno-Management Fest **Kritanj-2022** at NiT, Agarpara
- **IEEE Circuits and Systems Symposium** organized by **IEEE CASS Kolkata Chapter** and **IEEE CASS Hyderabad Chapter** jointly with Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex on 17th December, 2022. Prof. Salil Kumar Sanyal, Past Chair, CAS Kolkata Chapter gave his address.
- IEEE CASS Kolkata Chapter successfully conducted a Lecture session on **Industry 4.0: Engineering Education in allegiance with NEP 2020 on 24th August, 2022.**

- EEE CAS Kolkata Chapter organized a Technical Model Design Competition followed by a Technical Lecture on "**Application of Analog & Digital VLSI Simulation Software in EDA Industry**" at IEM , Salt Lake.

CIS

- The Fourth **Doctoral Symposium on Intelligence Enabled Research (DoSIER 2022)**, a two-day event, was hosted by **Cooch Behar Government Engineering College**, Cooch Behar, India during December 22-23, 2022 in collaboration with the **Algebra University College, Croatia** and in association with the **Acuminous Research Foundation (AcuminoR)**, providing doctoral students and early career researchers an opportunity to interact with eminent scientists from across the globe working on foundations, techniques, tools, and applications of computational intelligence. The event was technically sponsored by the Asia-Pacific Artificial Intelligence Association (AAIA), Kolkata Branch and IEEE Computational Intelligence Society, Kolkata Chapter.

COMSOC

- On June 2022, heavy rainfall had crippled the north eastern state of Assam leaving lakhs of people scrambling for dry/ high lands, food, and clean water. Assam received 62% above normal rainfall in the pre-monsoon season from March to May this year: 672.1 mm instead of an average of 414.6 mm, the highest in ten years. The rainfall also caused severe landslides in many of the hills surrounding the state. IEEE ComSoc Kolkata Chapter has donated generously funds to help the flood-hit areas of Silchar. IEEE ComSoc Kolkata Chapter in association with NITS-ComSoc Student Branch Chapter took an initiative to visit the flood affected areas and provide relief materials to the flood affected population. The "Flood Relief Activity" was organized on 1st July, 2022. Students and faculty members from the Institution organized this drive to supply cooked food and drinking water to flood-hit areas in and around the institute premises.

- **Cyber Security Congress 2022 - Kolkata** took place on 28th October 2022 at **Taj Bengal** as a 4th City after successful Execution in Bangalore, Mumbai and Delhi. IEEE ComSoc Kolkata Chapter was a technology partner in the event. Mr. Pallab Ganguly, Immediate Past Chair of IEEE ComSoc Kolkata Chapter was invited to deliver Keynote Address on the 'OT Security Demystified'.

- IEEE ComSoc Kolkata Chapter once again proudly collaborated as the "Associate Partner" in one of the most prestigious **ABP INFOCOM 2022**. In ABP's centenary year, the 21st edition of INFOCOM 2022 – Calcutta chapter was held between December 1-3, 2022 at ITC Sonar Calcutta.

- IEEE Communication Society **Kolkata** Chapter jointly with ComSoc **Bangalore**, **Kerala** and **Hyderabad** Chapter organized the 4th edition of **Graduate Congress: Graduate Thesis Evaluation in 7 minutes (GraTE-7)** on **22 April 2022** in online mode.

CS

- **National Workshop on Artificial Intelligence in Healthcare (NWAIH 2022)** organized by the Department of Computer Science and Engineering, Jalpaiguri Government Engineering College from 3rd to 5th August 2022, technically supported by the IEEE CS Kolkata Chapter, NASSCOM and CSI Kolkata Chapter.

- **International Conference on Data Electronics and Computing (ICDEC)** held at **North-Eastern Hill University, Shillong, Meghalaya**, India and it was organized by the Department of Electronics & Communication Engineering and Computer Applications in collaboration with COMYS Educational Trust, Kolkata, India. ICDEC 2022 was technically sponsored by the IEEE Computer Society Chapter Kolkata Section.

- The **5th International Conference on Computational Intelligence and Networks (CINE - 2022)**, held on 1-3 December at **KIIT, Bhubaneswar**, Odisha. CINE- 2022 was technically co-sponsored by Computer Society Chapter IEEE Kolkata Section. More than 100 participants attended the event.

CSS/IMS

- Department of Electrical & Electronics Engineering Department (EEE), Institute of Engineering & Management (IEM) organized a **five-day Faculty Development Program (FDP) on "Computational**

Intelligence in Control, Power and Instrumentation (CICPI) from January 31 to February 04, 2022. The program was technical co-sponsored by IEEE Joint CSS-IMS Kolkata Chapter.

- IEEE Joint CSS-IMS Kolkata chapter, in collaboration with the Department of Applied Physics, CU, organized a **"Two-Day Symposium on Application of Artificial Intelligence in Control, Measurement and Instrumentation"** on 23-24 September 2022.

DEIS

- IEEE DEIS Kolkata Chapter organized the **sixth edition** of **IEEE CATCON**, held at National Institute of Technology (NIT) Durgapur during 17th-19th Dec 2022 in a hybrid mode. This is the flagship conference organized by the Dielectrics and Electrical Insulation Society (DEIS) of IEEE Kolkata Section, which is the only one of its kind in India.

- Organized a lecture on **"Self-Driving Vehicle 3.0"** on 22-23 Jan, 2022. This was an online workshop wherein we introduced the concept of self-driving vehicles to all the participants. At the end, they conducted a hackathon named **'RACE HACKATHON'** in which the participants demonstrated their IoT projects.

EDS

- **IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON)** held on 26-27 November, 2022, at The Vedic Village, Kolkata, West Bengal, India and was organized by IEEE EDS Kolkata Chapter.

PES

- IEEE PES Kolkata Chapter one-day workshop for IEEE PES corporate members of CESC titled **"Application of IoT in Power Sector"** on 1st November 2022 at HRD**, CESC Limited, Taratolla**.

- **GREENINVENT-2022.** It was organized by **IEEE PES Kolkata Chapter**. It's funded by IEEE PES member driven initiative. It was an **innovative idea pitching competition on Clean and Sustainable Energy** in Indian scenario considering feasibility of implementation in current condition and socio-economic viability. Final was on 22nd December, 2022 at Downtown, Kolkata, seven selected ideas were presented. There were three prizes for total amount of INR 22k.

- Techno International Batanagar (A Unit of Techno India Group) is coming up with its first International Conference **on Intelligent Application of recent innovation in science & technology (IARIST),** for the year 2022 on **July 7th& 8th, 2022.**

- 2nd IEEE **International Symposium on Sustainable Energy & Signal Processing & Cyber Security (iSSSC 2022)**, from Dec 15-17, 2022 by **GIET University**, Odisha.

- Techno International Batanagar (A Unit of Techno India Group) is coming up with its first International Conference on **Intelligent Application of recent innovation in science & technology (IARIST)**, for the year 2022 on **July 7th& 8th, 2022.**

Photonics Society

- The IEEE Photonics Society Kolkata Chapter, IEEE Electron Device Society University of Calcutta Student Branch Chapter and IEEE Photonics Society University of Calcutta Student Branch Chapter has organized a **Science and Technology Exhibition Cum Competition -2022 (STEX'22)** on 27th September 2022 at the Institute of Radio Physics and Electronics, University of Calcutta.

- IEEE Photonics Society Kolkata chapter jointly with IEEE Photonics Society Calcutta University Student Branch Chapter and IEEE Calcutta University Student Branch organized **5th International Day of Light (IDL)** on 26th May, 2022 at N. R. Sen Auditorium (Science College).

SSSC

- MCKV Institute of Engineering in association with IEEE SSCS Kolkata chapter organized a technical competitive event **TECHNOTICA 2021-22**. It was an offline event held in MCKV Institute of Engineering premises on 31st March, 2022. It was an inter-college event. Students from various colleges

participated in prototype making contest. Industry expert Dr. Dhritinandan Kole, Research & Development Executive, Eltron Wireless was invited as judge for the event. 40 Students participated event.

- IEEE SSCS Kolkata chapter in association with IEEE MSIT Student Branch and department of ECE MSIT organized a one-day technical session on "**Prospects of FET based neuromorphic computing**". It was an offline event that was held in Meghnad Saha Institute of Technology on 11th May, 2022.

SPS

- **Two days' workshop on Modeling of Electrical Network by MATLAB/ SIMULINK**. was held on 11 July 2022 to 12 July 2022 at High Voltage Laboratory, Electrical Engineering Department, Jadavpur University. There were 28 participants (UG and PG students) in this workshop.

- IEEE conference 2022 International Interdisciplinary **conference on Mathematics, Engineering and Science, MESIICON 2022 that was taken place at the Campus of Dr. B. C. Roy Engineering College**, Durgapur during 11th -12th November 2022. The conference was technically sponsored by IEEE Kolkata section.

NT Council Chapter Silchar

- IEEE Nanotechnology Council Chapter, Silchar in association with IEEE ED NIT Silchar Student Branch Chapter and Department of Electronics and Communication Engineering, National Institute of Technology Silchar organized IEEE EDS/NTC Summer School on "**Recent Trends in Micro/Nanoelectronics Devices**" from 20-24 Aug 2022 through hybrid mode.

- Silchar town of Cachar district was submerged by the devastating flood due to heavy rain and excess water flow beyond the danger level in the Barak River during 17-27 June 2022. The entire district was very badly affected by the flood situation. On 28th June 2022, the **IEEE EDS/NTC/WIE members** reached to 230 flood affected families covering five nearby villages of NIT Silchar and distributed food and grocery items. It gives immense happiness to the IEEE members for contributing a little to the society.

B.3 Professional and Continuing Education Activities

Educational Activities Subcommittee of the Section did two major events this year, both were funded by R10. One was the Workshop on Curriculum Development for Accreditation. Another was Proyog – 2022 which was a project competition for mostly pre-university students. IEEE WIE Kolkata Section along collaborated with Binapani Ashram Trust organisers in arranging a workshop Haat-e-Kolome on 12th and 13th of November 2022 with 46 participating school going girls.
Professional Development subcommittee organized two Milestone lectures and several technical lectures.

B.4 Student Activities:

- IEEE JU SB organized the event **"Hello IEEE"** on 14th September, 2022, an event aimed at interacting and making connections and learning from the global leaders. The event was packed with engaging sessions with our experts followed by multiple competitive tracks to engage and reward the attendees. Over 200 participants had attended the event both virtually and in person.
- **All India Computer Society Student Young Professional, 2022 (AICSSYC'22)** held from 17th December, 2022 to 19th December, 2022. Adorned with legacy and acclaimed by industry leaders and professionals all over the world, AICSSYC'22 yet again stood up to its fame as the members of IEEE JU SB can proudly boast of another successful edition of this grand event. Hosted by Sun City Resort.
- Two years of pandemic more than ever nurtured the desire for organizing an offline event, and it would take no less grand an event than **TechX Congress 2.0** to restart IEEE JU SB's offline campaign with pomp and glory. The Eastern Indian Techno-Management Leadership Summit was hosted by the IEEE computer society in collaboration with two of India's premier IEEE student branch chapters - Jadavpur University and NIT Durgapur. Hosted by Creek Boutique Resort, Shantiniketan, Birbhum

- IEEE ED MSIT SBC in association with the Rotaract Club of Meghnad Saha Institute of Technology as a part of the World Rotaract Week Initiative organized an event, **Vriksha Phase-V**: A Tree Plantation Drive at MSIT College Campus. The initiative of the event was to create an awareness in building a cleaner and a greener Earth for a healthy and balanced life in the eco-system.

- IEEE ED MSIT Student Branch Chapter, in association with the Department of ECE, Meghnad Saha Institute of Technology organized a Student Project contest titled "**Project Contest on VLSI Circuits**" on June 13, 2022.

- IEEE Student Branch, NIT Durgapur conducted **DogeX- The Internet of Value, a one-of-its-kind initiative** to introduce the freshers and enthusiastic participants to the Blockchain Technology on 2-3 Feb, 2022.

- IEEE Student Branch, NIT Durgapur, conducted **UdesignX**, a virtual UI/UX Workshop that featured some of the most renowned personalities in the field from all over the globe on 11-12 March, 2022.

- **Datacon'22** was one of the unique initiatives undertaken by the IEEE Student Branch, NIT Durgapur. This event was organized to provide technical insight into various emerging and research-oriented fields to inquisitive students from various courses across colleges all over the country.

- IEEE ED NIT Silchar Student Branch Chapter, Assam, India in association with IEEE Nanotechnology Council Chapter, and Department of Electronics and Communication Engineering, National Institute of Technology Silchar organized IEEE EDS Summer School on "**Recent Trends in Micro/Nanoelectronics Devices**" from 20-24 Aug 2022 through hybrid mode.

- The IEEE Student Branch of BIT Deoghar organized **TechGenix** on 8th January, 2022. TechGenix was organized with a vengeance this new year! Participants experienced three magnific rounds of this incredible event for two days.

- The IEEE Student Branch of BIT Deoghar organized **Code Wars 2.0 on** 2nd April, 2022. IEEE Student Branch BIT Deoghar created a wise chance in the name of Code Wars 2.0 to showcase participants' coding skill.

- The IEEE Student Branch of BIT Deoghar conducted an online event **P4P: Preparation for Placement**, a mock placement drive for all BTECH third and fourth year students.

- IEEE Student Branch-UEM Kolkata organized Circuitrix—a 2-day Offline Circuit Building and Quiz Competition in Collaboration with Ureckon 2022—The Annual Techno-Management Fest of UEM Kolkata as an event of Ureckon 2022.

- IEEE Student Branch-UEM Kolkata organized this workshop in collaboration with ACM UEM Kolkata Student Chapter, CSI UEM Kolkata Student Chapter and URECKON 2022—The Annual Techno-Management Fest of UEM Kolkata.

Newly formed Student Branches (SB) / Student Branch Chapters (SBC) 2022

Sl No.	Unit Name	Geo-code	Formation date
1	Maulana Abul Kalam Azad Univ of Tech, West Bengal Student Branch	STB60204790	March 11, 2022
2	GIET University Consumer Technology Society Student Branch Chapter	SBC11514B	February 3, 2022
3	Narula Institute of Technology, Power & Energy Society Student Branch Chapter	SBC14018B	March 2, 2022
4	Asansol Engineering College Student Branch	STB41641782	June 29, 2022
5	St Thomas College of Engineering & Tech-Kolkata Student Branch	STB60020653	July 11, 2022
6	Indian Institute of Technology - Patna Communications Society Student Branch Chapter	SBC14591	July 15, 2022

7	National Institute of Technology - Durgapur Computer Society Student Branch Chapter	SBC28301	July 15, 2022
8	Asansol Engineering College, Microwave Theory and Techniques Society Student Branch Chapter	SBC41641782	August 9, 2022
9	Heritage Institute Of Technology-Kolkata Microwave Theory and Technology Society Student Branch Chapter	SBC64611B	29 August 2022
10	St. Thomas College of Engineering & Tech -Kolkata Student Branch	STB60020653	August 4, 2022
11	Institute of Engineering & Management, Microwave Theory and Technology Society Student Branch Chapter	SBC14301G	September 22, 2022
12	National Institute of Technology - Durgapur, Computer Society Student Branch Chapter	SBC28301	July 15, 2022
13	Indian Institute of Technology - Patna, Communications Society Student Branch Chapter	SBC14591	July 15, 2022
14	Indian Inst of Tech-Guwahati, Power Electronics Society Student Branch Chapter	SBC61571A	November 19, 2022

B.5 Affinity Group Activities

Total Affinity Groups: 03

i)   Young Professional (YP) Affinity Group
ii) Women in Engineering (WIE) Affinity Group
iii) Life Member (LM) Affinity Group

YP Affinity Group

- Technical Lecture on "**Smartphones and Social Data Science: A user behaviour study using mobile sensing**" (Dr. Kalyan Sasidhar, Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, Gujarat) jointly organized by IEEE Computer Society Chapter Kolkata section, and IEEE Young Professionals Kolkata Section on 20th June 2022.
- One-day Seminar on "Step into IT service industry" (Dr. Chintan Mondal, Chairperson, IEEE Young Professionals, Kolkata Section & Faculty Member, Department of Computer Sc, Jadavpur University, and Mr. Indraneel Bhattacharya, Program Manager, Capgemini.) organized by IEEE Young Professionals, Kolkata Section on 28th May, 2022.
- One-day Seminar on "3D Genomics using Al Techniques" (Speaker: Dr. Anup Kumar Halder, Assistant Professor (Research), Warsaw University of Technology, Poland) organized by IEEE Young Professionals, Kolkata Section on 12th May, 2022.

WIE Affinity Group

- To **International Women's Day** is a day on 8th March, IEEE Women in Engineering (WIE) Kolkata Section organised a talk on "**Personal Branding**" as women often either neglect it or are too shy to practice. The talk was delivered by Sri. Buddheswar Roy.
- IEEE, WIE Kolkata Section organized a WIE Track in TechX Congress is the Eastern Indian Techno-Management Leadership Summit organised jointly by two IEEE student branches.

- On this 75th year of Independence, the Dare to Dream (D2D) talk focused on the pioneer **Dr. Asima Chatterjee** who was the first woman to receive a Doctor of Science degree from an Indian university. Asima Chatterjee (1917-2006) was an Indian organic chemist noted globally for her work in the fields of Organic Chemistry and Phytomedicine from the pre-independence days despite the limited laboratory resources available to the scientists in India, during that time. The talk was delivered by Professor Dr. (Mrs.) Julie Banerji, PhD, PRS, FAScT, FISC, Former Khaira Professor of Chemistry, University of Calcutta on 24th July, 2022.

- **Outreach Event – "Haat-e-Kolome" - A hands on introduction to electronic circuits.**
  IEEE WIE Kolkata Section along with IEEE EDS Center of Excellence, IEEE EDS SBC Heritage Institute of Technology, Kolkata and IEEE Kolkata Section SIGHT Group collaborated with Binapani Ashram Trust organisers in arranging a workshop on 12th and 13th of November, 2022 with 46 participating school going girls.

(Detailed report is attached in Annexure II)

B.6 Awards & Recognition Activities

- **Prof. Sanghamitra Bandyopadhyay** has been conferred with **"PADMASHRI"** Award by the Government of India for her contribution in Science and Technology.

- **Prof. Sivaji Chakravorti and Mr. Sanjay Kar Chowdhury** have been awarded **IEEE Region 10 Outstanding Volunteer Award** for the year 2022.

- **Prof. Sivaji Chakravorti** has been awarded the **Lifetime Achievement Award of IEEE India Council** for the year 2022.

- **Prof. Sushmita Mitra** has been elected a Fellow of The World Academy of Sciences (TWAS)

- **Prof. Debatosh Guha** has been elected Fellow of Indian National Science Academy (INSA).

- **Prof Salil Kumar Sanyal** became IEEE Life Senior Member.

- **Dr. Mousiki Kar** has been selected as a **STEM Champion,** by **IEEE TryEngineering**, USA and as a **Leader**, **IEEE MOVE Outreach India Program Education Committee**, **IEEE India Council.**

- This year IEEE Kolkata Section recognizes contribution of its illustrious members in the following categories:

1) "Lifetime Achievement" Awardees for 2022:

    1.   Shibani Das

    2.   Kalyan Kumar Mallik

2) "Outstanding Volunteer(s)" of Kolkata Section for 2022:

    1.   Chinmoy Kumar Panigrahi

    2.   Sudeshna Choudhury

3) "Outstanding Student Volunteer(s)" of Kolkata Section for 2022:

    1.   Biswajit Chakraborty

    2.   Subhajit Maur

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Home Page of the Section : https://ewh.ieee.org/r10/calcutta/index.html

- The webpage is updated twice a month.

- It's social media include

- YouTube : https://www.youtube.com/channel/UCp6nlg7x8BlbbeyN068mZdA

- Facebook: https://www.facebook.com/groups/296725217027996

- Twitter : https://twitter.com/IeeeKolkata

- WhatsApp Group

B.8 Industry Relations

- The Industry-Academia Dialogue Forum of IEEE Kolkata Section jointly with Power & Energy Society Kolkata Chapter organized a workshop on "**E-VEHICLE: Research opportunity with Industry-Academia collaboration**" on 18th May, 2022 from 3:00 PM in virtual platform.

- The Industry-Academia Dialogue Forum of IEEE Kolkata Section conducted a one-day plant visit to the state of the art thermal power station of **Haldia Energy Limited** on 19 July 2022. The workshop is a step in the Net-Zero journeys and is focused on industry-academia collaboration to identify research areas and innovation in carbon footprint reduction.

- One day workshop for IEEE PES corporate members of CESC titled "**Application of IoT in Power Sector"** on **1st November 2022, Tuesday, 10AM-5PM. At HRD, CESC Limited, Taratolla.** Total participants were 60.

B.9 Humanitarian Technology Activities

- On June 2022, heavy rainfall had crippled the north eastern state of Assam leaving lakhs of people scrambling for dry/ high lands, food, and clean water. Assam received 62% above normal rainfall in the pre-monsoon season from March to May this year: 672.1 mm instead of an average of 414.6 mm, the highest in ten years. The rainfall also caused severe landslides in many of the hills surrounding the state. Silchar, the second largest city of Assam faced its worst flood in living memory with more than 80% of the city being inundated. The rainwater from neighboring hilly states like Manipur and Mizoram added to the flooding, breaching the Bethukandi dyke on Barak River was primarily responsible for Silchar's fate. IEEE ComSoc Kolkata Chapter has donated generously funds to help the flood-hit areas of Silchar. IEEE ComSoc Kolkata Chapter in association with NITS-ComSoc Student Branch Chapter took an initiative to visit the flood affected areas and provide relief materials to the flood affected population. The "Flood Relief Activity" was organized on 1st July, 2022. Students and faculty members from the Institution organized this drive to supply cooked food and drinking water to flood-hit areas in and around the institute premises.

- A project titled **"Development of IoT Based Virtual Laboratory System (#22-APHAC-02)"** in response to the IEEE AP-S & IEEE HAC Call for Proposals on Signal Processing Technologies for Local Community Challenges is being carried out the SIGHT Group of IEEE Kolkata Section.

B.10 Community Activities

- The Section organized a **Social Meet** after two long years at **Upasana Park (Bisarjan Ghat)**, New Town on Sunday, March 13, 2022. The place was a beautiful spot with lots of trees and a Bisarjan Ghat. We reached the venue at around 10 am. A total 32 persons participated in the picnic. The breakfast was served at the venue once the participants reached there. Lunch was served at 1.30 pm and followed by tea and light snacks in the afternoon. We enjoyed the whole day and left the place around 5:45pm.

(Detailed report is attached in Annexure III)

(Detailed report of subsections is attached in Annexure IV)

PART C
OTHERS

C.1 Special Events
Nil

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- The relationship with National Societies like The Institution of Engineers (India), The Institute of Electronics & Telecommunication Engineers India (IETE), and Computer Society of India is cordial.

- Student member retention is low and some student branches become inactive – explore possibility of re-opening of student branch through incentive schemes. However new student branches are formed and new members are added every year

C.3 Collaboration with other IEEE Sections

- Chair, WIE Group of IEEE Kolkata Section was the guest of honor in inaugurating the IIIT-Naya Raipur IEEE Women in Engineering (WIE) Affinity Group Student Branch on 23rd August 2022.

- IEEE Hyderabad Section Jt. Chapter of IEEE CIS/GRSS Societies, Hyderabad Section in Association with SNIST Student Branch organizing 7th John McCarthy Memorial Lecture by Prof. Sushmita Mitra, Chair, IEEE Kolkata Section.

C.4   Support extended to Sub-sections & Society Chapters within the Section

- IEEE Bhubaneswar Subsection with IEEE Kolkata Section organized **INDISCON 2022** on 15-17 July, 2022 at in School of Electrical Engineering, KIIT, Deemed to be University. INDISCON is the flagship annual sub-sectional international conference of the IEEE India Council. This was the 3rd edition.

- IEEE Rourkela Subsection in association with IEEE Kolkata Section organized **IEEE Wireless, Antenna and Microwave Symposium 2022 (WAMS 2022) (#54719), 05 Jun 2022**. A total of 235 papers were submitted, and 170 papers got accepted for presentation at the conference, with 124 oral presentations and 46 poster presentations. An unprecedented number of 57 awards were given in total, including 17 technical field awards, 30 student travel grants, and 10 student activity awards.

- IEEE Rourkela Subsection in association with IEEE Kolkata Section organized **2nd IEEE International Symposium on Sustainable Energy, Signal Processing and Cyber Security (IEEE-iSSSC 2022, #56467), 15 – 17th December 2022**, GIET University, Gunupur, India. A total of 288 papers were submitted, and 124 papers got accepted for presentation at the conference. There are 5 Best paper

awards given to the selected papers. Rourkela Sub-section acted as Technical co-sponsor and a large number of members were involved in various activities of this conference.

- IEEE Guwahati Subsection in association with IEEE Kolkata Section organized **The 4th International Conference on Energy, Power & Environment.** The Department of Electrical Engineering of NIT Meghalaya conducted 4th International Conference on Energy, Power & Environment, Technically Co-Sponsored by IEEE Guwahati Subsection, IEEE Kolkata Section, IEEE IAS, and NIT Meghalaya during 29 April – 01 May 2022.
- IEEE Silchar Subsection jointly with IEEE Kolkata Section organized IEEE SILCON-2022 as a flagship annual international conference of IEEE Silchar Subsection from 4th to 6th November 2022 in Hybrid Mode. The IEEE SILCON conference series aimed to gain significant interest among researchers, academicians, professionals, and students in the region, covering all the technical areas related to IEEE.

C.5 Best Practices of your Section

- Engaging IEEE members in different activities
- Organizing events in all possible verticals such as industry, WIE, YP, educational activity, STEM, SIGHT etc.
- Activate student branches
- Active participation of local students in IEEE activities

C.6 Problems to be anticipated
- Involvement of members in section activities not as per expectation
- Limited participation of section volunteers in national and international committees
- Limited Funding for attending conference
- Number of members from industry is low

PART D
GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- To organize one-day Program involving all Branch Counselors from all student branches.
- To organize some special memorial lecture in each year.
- To provide thrust for YP and Student Educational Programs to make them understood the importance of being associated with IEEE activities.
- To organize programs involving WIE members to spread message to young women for the cause of IEEE WIE.

D.2   Goals and Future Plans
- Retention of existing members through membership development Programs like elevation to Senior Member grade, recognizing the efforts of active members by awarding them citations or personalized plaques.
- Increasing activities of section by arranging more lecture meetings, not necessarily technical but also on public affairs, professional activities, educational trips for students to nearby industries.
- To spread the message of IEEE within Kolkata Section jurisdiction.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

- Innovative Project and Design Model Contest (focusing on Humanitarian activities) among young student members from different SB/SBCs under Kolkata Section. After initial screening process the selected students will be invited to present their work in front of panel and all participating SB/SBCs.

  Students member will be called for interaction with Section Leaders to address any grievance, problem. This will enhance bonding of Members with Section and will get motivated.

- Collaborative programs with different OUs and affinity groups for HAC as well as STEM programs.