

IEEE Kharagpur Section

Annual General Meeting (AGM) Report for the Year 2021

(01 Jan. 2021 - 31 Dec. 2021)

IEEE Kharagpur Section
Annual Report for the Year 2021
Presented at the Annual General Meeting (AGM) on March 2, 2022 (Wednesday)

PART A - SECTION SUMMARY

A1. Executive Committee

- Section Executive Committee Member List:

Sudip Misra, Chair
 Debdoot Sheet, Vice Chair
 Mrinal Kanti Mandal, Secretary
 Dipankar Debnath, Treasurer
 Rajat Subhra Chakraborty, Assistant Secretary and Webmaster
 Chirodeep Bakli, Student Activities Chair (SAC) for Student Branches (SB)
 Adway Mitra, Student Activities Chair (SAC) for Student Branch Society Organizational Units (SocOU)
 Debashree Guha Adhya, Humanitarian Activities Chair (SIGHT)
 Gorachand Dutta, Technical Activities Chair
 Shailendra Varshney, Membership Development Chair
 Saumik Bhattacharya, Industry Relations Chair
 Sarang Pendharker, Educational Activities Chair
 Pabitra Mitra, Awards and Nominations Chair
 Aneek Adhya, Conferences and Events Chair
 N. K. Kishore, Historian
 Debarati Sen, Advisor and Immediate Past Chair
 Shailendra Varshney, Advisor
 Chittaranjan Mondal, Advisor
 Ashish Hota, Control Systems Society (CSS) Chapter Chair
 Sudip Nag, Engineering in Medicine and Biology Society (EMBS) Chapter Chair
 Sudipta Mukhopadhyay, Signal Processing Society (SPS) Chapter Chair
 Manjira Sinha, Women in Engineering (WiE) Affinity Group Chair
 Amitalok J Budkuley, Young Professionals (YP) Affinity Group Chair
 Nidhi Pathak, IIT Kharagpur Student Branch Chair

A2. Constituent Bodies

IEEE Kharagpur Section (R00155)

- IEEE Control Systems Society (CSS) Chapter (CH10150)
- IEEE Engineering in Medicine and Biology Society (EMBS) Chapter (CH10723)
- IEEE Signal Processing Society (SPS) Chapter (CH10742)
- IEEE Women in Engineering (WiE) Affinity Group (WE00155)
- IEEE Young Professional (YP) Affinity Group (YP00155)
- IEEE Student Branch of IIT Kharagpur (STB20461)
 - IEEE Signal Processing Society (SPS) Student Branch Chapter (SBC20461A)
 - IEEE Antenna and Propagation Society (APS) and Microwave Theory and Techniques Society (MTTS) Joint (AP-MTTS) Student Branch Chapter (SBC20461B)
 - IEEE Engineering in Medicine and Biology Society (EMBS) Student Branch Chapter (SBC20461C)
 - IEEE Computer Society (CS) Student Branch Chapter (SBC20461D)
- IEEE Student Branch of Haldia Institute of Technology (STB66361)

A3. Membership statistics:

Fellow: **2**
 Senior Member: **44**
 Life Senior Member: **2**
 Members: **118**
 Associate Member: **1**
 Graduate Student Member: **143**
 Student Member: **40**
 Total: **350**

A4. Financial Report:**Statement of Section Accounts for January - December 2021**

Fixed Deposit value as on 01/01/2021: INR 7,36,305.00
FD1 = INR 77,272.00 (A/C No: 00000033590297286)
FD2 = INR 38,215.00 (A/C No: 00000033590291148)
FD3 = INR 1,20,818.00 (A/C No: 00000037189865433)
FD4 = INR 5,00,000.00 (A/C No: 00000039715965108)

Fixed Deposit value as on 31/12/2021: INR 7,74,497.00
FD1 = INR 82,095.00 (A/C No: 00000033590297286)
FD2 = INR 40,600.00 (A/C No: 00000033590291148)
FD3 = INR 1,26,848.00 (A/C No: 00000037189865433)
FD4 = INR 5,24,954.00 (A/C No: 00000039715965108)

RECEIPTS AND PAYMENTS ACCOUNT FOR THE PERIOD 01/01/2021 TO 31/12/2021

RECEIPTS	Amount (Rs.)	Amount (Rs.)
To Opening Balance		
Cash at Bank	11,44,560.43	
Cash in Hand	158.00	11,44,718.43
" IEEE HQ & Societies		6,96,924.00
" Donations / Contribution		9,620.00
" Savings Bank Interest Receipts		31,588.00
" Fixed Deposit Interest Receipts		32,828.00
" Receipts from Branch Account Closure		31,943.00
" Fixed Deposit Matured		7,41,669.00
TOTAL (Rs.)		26,89,290.43
PAYMENTS	Amount (Rs.)	Amount (Rs.)
To Travel Expense		42,000.00
" Grants and Awards Expenses		1,12,700.00
" Meetings and Social Events Expenses		1,11,526.61
" Fixed Deposit Re-invested		7,74,497.00
" Furniture & Fittings		22,840.00
" Audit Fees (2020)		5,000.00
" Student Activities		31,259.00
" Loan Disbursement		1,25,000.00
" Management Services		8,400.00
" Donation / Humanitarian Support		20,000.00
" Closing Balance		
Cash at Bank	14,36,067.82	
Cash in Hand	0.00	14,36,067.82
TOTAL (Rs.)		26,89,290.43

- *Major Section, Society Chapters and Affinity Group Activities*
 - Organized 12 technical talks, 4 industry talks, and 5 humanitarian technology activities.
 - Organized 12 administrative meetings, one every month in the 1st week, involving all OUs.
 - IEEE Day 2021 celebrated across days with the IEEE Meetup coordinated by YP-AG.
 - Gender sensitization, mental well being talks and seminars organized by WiE-AG along with SIGHT/HAC.
 - Conducted two membership drive events.
 - 9th International Conference on Power Systems (ICPS 2021) in IIT Kharagpur was technically co-sponsored by IEEE Kharagpur Section during 16 -18 Dec 2021.
 - 16th IEEE International Conference on Industrial and Information (ICIIS 2021) in University of Peradeniya was technically co-sponsored by IEEE Kharagpur Section during 9th-11th December 2021.
 - All members of the Section received a season's greeting gift packet of munchies, with a reminder message for renewal.

- *Major Student and Student Chapter Activities*
 - Organized 67 technical talks
 - Organized 14 administrative meetings
 - Workshops on Matlab, LaTeX, Python were organized keeping up with previous practices
 - AP-MTTS-SBC co-organized the CoVigilance - A PAN INDIA STUDENT CONTEST.
 - CS-SBC organized a series of talks on Academic Research Career in the New Normal.
 - CS-SBC organized workshop on Embedded AI @ Edge.

PART B - ORGANIZATIONAL ACTIVITIES

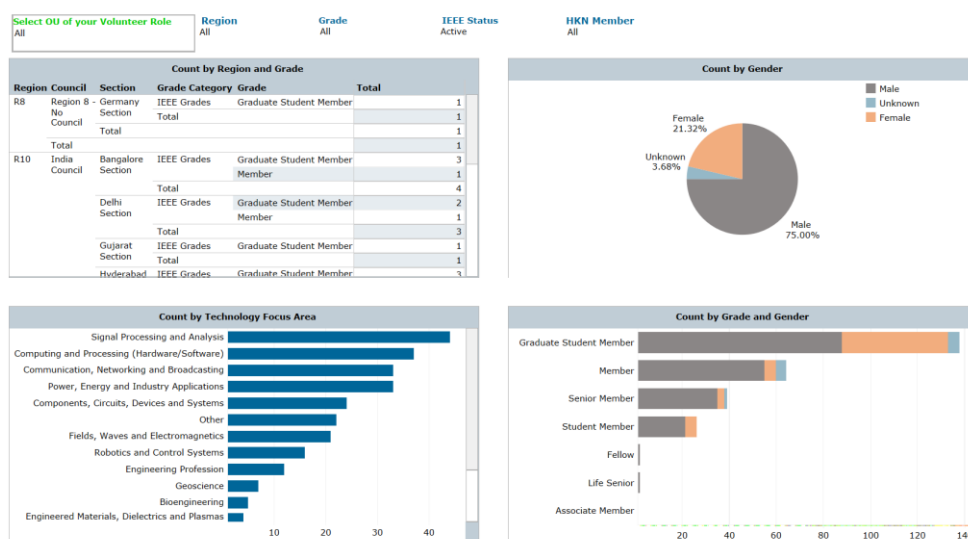
B1. Membership Development Activities

- Total number of active members in the past 3 years:
 - 2017: 378
 - 2018: 386
 - 2019: 396
 - 2020: 392
 - 2021: 336
 - Current: 413 (See below)

IEEE OU Analytics

Members and Affiliates - Dashboard

This dashboard provides interactive views for members, society affiliates, and participants by region, geographic council, section and subsection.
 • Refine data through filters or click within a visualization to view results and details.
 • Hover over a visualization to display a tooltip with statistical facts.
 • Important: Choose an OU from "Select OU of your Volunteer Role" filter to view customized results for your OU position.



Note: Data displayed is based upon volunteer access privileges.
 Data made available through this platform is IEEE Confidential Information. Please review the IEEE Guide to Classification of Documents policy for more information.

- Organized Membership development and retention drive on 14 Nov. and 11 Dec. 2021.

B2. Chapter Activities

- Total number of Chapters in the Section: **3**
- Number of Chapters formed in the current year: **0**
- Number of active Chapters: **3**
- Summary of Chapter activities

	Technical	Professional	Admin.	Social	Others
IEEE Control Systems Society (CSS) Chapter (CH10150)	5	1	1	0	0
IEEE Engineering in Medicine and Biology Society (EMBS) Chapter (CH10723)	5	1	1	0	0
IEEE Signal Processing Society (SPS) Chapter (CH10742)	4	2	1	0	0

B3. Professional and Continuing Education Activities

- Organized **12** technical talks from Section and 18 talks from the Section Chapters.
- Organized **2** conferences

Detailed Activity Report

B4. Professional and Continuing Education Activities

Kharagpur Section (Geo Code - R00155), Chair: Sudip Misra

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	05 Jul 2021	Dr. Dibyendu Das	Deep-learning based Compiler Optimizations : Kharagpur Section	14	5
2	08 Jul 2021	Dr. Sriram Rajamani	Models and Programs: Better Together : Kharagpur Section	12	11
3	15 Jul 2021	Dr. Vinayak Honkote	Distributed Autonomous Systems: Challenges, State-of-the-art, and Implementation Insights - A Hardware Perspective : Kharagpur Section	8	2
4	15 Jul 2021	Mr. Aditya Kameswara Rao Nandula	The IEEE Brand : Kharagpur Section	12	0
5	02 Aug 2021	Dr. Soumya Bose	Batteries not Included: Integrated Circuits for Self-Powered Portable and Wearable Sensing Systems : Kharagpur Section	7	3
6	07 Aug 2021	Mrs. Juliet Karmakar Mondol	Behavior Modification of Children and Adults	10	90
7	14 Aug 2021	Dr. Sumit Mazumdar	The uncertain era of coronavirus pandemic - what we need to be worried about, and what to be not?	8	30
8	21 Aug 2021	Mrs. Juliet Karmakar Mondol	Teachers Communication and Verbal Requisites during Online Teaching	6	30
9	28 Aug 2021	Dr. Gayatri Mukherjee	The world's most efficient army: our immune system	8	80
10	04th September.	Dr. Anuradha Choudhary,	Inner Vaccines	5	20
11	14 Nov 2021	Multiple speakers	Membership Drive 2021 " Know Your IEEE Kharagpur Section " : Kharagpur Section	17	5
12	11 Dec 2021	Multiple speakers	Membership Drive 2021 " Know Your IEEE Kharagpur Section " : Kharagpur Section	10	4

Control System Society (Geo Code – CH10150), Chair: Ashish Hota

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	10 Mar 2021	Mr. Sreejakumar Nair	Role of Power Electronics in Battery Electric Vehicles and Charging systems : Kharagpur Section Chapter, CS23	4	38
2	17 Mar 2021	Mr Ranajay Mallik	Electric Vehicle Chargers	6	28
3	07 Jul 2021	Prof. Shubhendu Bhasin	Overview of Battery State-of-Charge Estimation	4	14
4	19 Jul 2021	Prof. Antonella Ferrara	Recent Results on Hierarchical MPC/SMC of Nonlinear Constrained Uncertain Systems	6	12
5	04 Oct 2021	Prof. Cosimo Della Santina	Model-based control of articulated and continuum soft robots	5	16
6	10 Dec 2021	Dr. Soumya Kundu	Towards Distributed Intelligence and Controls for Emerging Energy Systems	4	2

Signal Processing Society (SPS) Chapter (Geo Code – CH10742), Chair: Sudipta Mukhopadhyay

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	14 Jan 2021	Dr. Saikat Chatterjee	On Ability and Inability of Artificial Intelligence	9	13
2	11 Jun 2021	Dr. Ardhendu Pathak	What You Don't Learn in the Classroom	6	6
3	23 Jul 2021	Dr Saikat Sahoo	Autonomous control of lower limb assistive devices and exoskeletons	3	7
4	10 Sep 2021	Mr. Kiran Reddy	Speech-based biomarking of heart failure	3	10
5	29 Oct 2021	Dr. Vikrant Karale	A CADe system for detection of microcalcification clusters in mammograms	7	7
6	09 Dec 2021	Many speakers	Standing Together	4	8

Engineering in Medicine and Biology (EMBS) Society Chapter (Geo Code – CH10723), Chair: Sudip Nag

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	14 Jan 2021	Dr. Arindam Basu	i2BMI: Intelligent Implantable Brain Machine Interfaces	21	51
2	24 Jan 2021	Dr. Mrigank Sharad	VLSI for Biomedical Devices	9	12
3	29 Jun 2021	Dr. Reza Erfani	Capacitive Wireless Power Transfer to Bio-Implants: Emerging Methodology for Biosafe, High Power Delivery to Flexible/Co	9	13
4	24 Jul 2021	Prof. Maryam Shojaei Baghini	Analog on-chip Electronics for Medicine	9	14
5	02 Sep 2021	Dr. Soumen Manna	Small Sample Classification Problems: Estimation of Evaluation Metrics for Model Selection for Medical Applications	12	30
6	15 Nov 2021	Dr Arindam Kushagra	Life engendering phenomena: A bottom-up viewpoint	5	8

B5. Student Activities**(Reported for the period of 1 Nov. 2020 - 31 Oct. 2021 as per Cycle of Student OUs)**

Total number of Student Branches in the Section: 2

Number of Student Clubs/Societies: 4

Number of Student Branches/Clubs/Societies formed in the current year: 0

Branch level student activities

IEEE Student Branch of IIT Kharagpur (Geo Code - STB20461)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	30-January-2021	Dr. Kumar Rahul	Career Opportunities in Data Science and Machine Learning	21	12
2	11-February-2021	Pavan Kushwaha	The Accidental Entrepreneur: A hacking incident inspired a college student to establish India's leading Cyber Security start-up	10	8
3	13/03/2021 to 17/03/2021	Collaboration with Technology Robotics Society	Winter School of AI and Robotics 2021	6	297
4	20-April-2021	Dr. Durlabh Singh Kowal	Transition to transform from student life to job applicant	8	22
5	24-April-2021	Dr. Anandarup Mukherjee	Lessons learnt during at-home system development for scientific monitoring	8	12
6	26-Jun-2021	Ramneek Kalra	Edge Computing: An extension to Cloud Computing	8	16
7	28-Jul-2021	Prof. Raed Shubair	Personalized Medicine: Re-engineering Healthcare of the Future Through Communication and Computation Technologies	9	10
8	30-July-2021	Mr. Ranbir S Sedhey, Mr. Dhanu Kumar	Boost Your Career with IEEE	13	4
9	8-July-2021	Mrs. J. Karmakar Mondol	Adoption in the New Normal Guidance and Awareness	4	60
10	14/08/2021	Dr. Sumit Mazumdar	Adoption in the New Normal Guidance and Awareness	6	120
11	21/08/2021	Mrs. J. Karmakar Mondol	Adoption in the New Normal Guidance and Awareness	4	421
12	28/08/2021	Dr. Gayatri Mukherjee	Adoption in the New Normal Guidance and Awareness	5	100
13	31/08/2021	Dr. Monalisa Pal, Mathworks	Online Matlab workshop on "Onramp party"	10	164
14	4 Sept 2021	Dr. Anuradha Choudhary	Adoption in the New Normal Guidance and Awareness	3	28

IEEE Signal Processing Society (SPS) Student Branch Chapter (Geo Code - SBC20461A)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	20-January-2021	Prof. Amit Patra and Prof. Nirmalya Ghosh	Some Recent Experiences in Signal Processing for Detection of Cardio-vascular Diseases – Part II	14	13
2	2-February-2021	Prof. Dimitri Van De Ville	Graph Signal Processing for Computational Neuroimaging	16	11
3	27-February-2021	Dr Anjith George	Secure Face Recognition: Countermeasures for Presentation Attacks	9	7
4	10-Mar-2021	Prof. Pier Luigi Dragotti	New Sparse Sampling Methods: Time-based sampling and sampling along trajectories	16	8
5	23-April-2021	Dr Karen Livescu	Embeddings for spoken words	8	12
6	5-Aug-2021	Prof. Qing Zhao	Random Walk on a Tree for Stochastic Optimization and Learning	6	9
7	30-Aug-2021	Dr. Ami Wiesel	Three examples of "easy" non-convex optimizations	6	13
8	22-Oct-2021	Dr. Lily Chamakura	Feature selection via instance voting	9	7

IEEE Antenna and Propagation Society (APS) and Microwave Theory and Techniques Society (MTTS) Joint (AP-MTTS) Student Branch Chapter (Geo Code - SBC20461B)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	12-January-2021	Dr. Duixian Liu	Organic Antenna-in-Package Designs for Millimeter Wave Applications	20	50
2	19-February-2021	Prof. Kamal Sarabandi	My Research Journey in Applied Electromagnetics	62	69
3	15-Mar-2021	Dr. Oscar Quevedo Teruel	Lens antennas: Fundamentals and present applications	44	52
4	8-April-2021	Dr. Thayananthan Thayapara	HF Over-The-Horizon Radar (OTHR)	23	55
5	12-April-2021	Payam Heydari	Transceivers for 6G Wireless Communications: Challenges and Design Solutions	24	80
6	28-Apr-2021	Dr. Kaushik Sengupta	Towards Universally Programmable Chip-Scale THZ Source, Sensors and Systems: Bridging the THz and Application Gap in the Next Decade	21	41
7	24-Jun-2021	Prof. Shanker Balasubramaniam	Novel Computational Tools For High Fidelity Electromagnetic Simulation	17	55
8	28-Jun-2021	Prof. K. P. Ray	Microwave System to disintegrate the Corona Virus (COVID 19) "ATULYA"	35	85
9	16-Aug-2021	Multiple	CoVigilance - A PAN INDIA STUDENT CONTEST	12	42
10	2-Oct-2021	Multiple	Valedictory session for PAN India Contest CoVigilance 2021	20	24
11	3-Oct-2021	Multiple	Tree Plantation: Physical Social Event	9	11

IEEE Engineering in Medicine and Biology Society (EMBS) Student Branch Chapter (Geo Code - SBC20461C)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	21-January-2021	Dr. Soumyo Mukherji	Biosensors - Simplicity is the name of the game	5	5
2	11-February-2021	Prof. Sunil K. Agrawal	Robotics to Characterize, Retrain, and Restore Human Movement	7	5
3	4-March-2021	Tiago H. Falk	Mobile Brain-Computer Interfaces: Challenges and Opportunities for Real-World Applications	10	13
4	17-Mar-2021	Neerav Karani	Methods for tackling domain shifts in medical image analysis	3	2
5	25-Mar-2021	Dr. Cynthia A. Chestek	Neural Interfaces for controlling finger movements	12	15
6	26-Mar-2021	Dr. Tapan K Gandhi	Brain Mapping & Artificial Intelligence: Challenges & Opportunities	3	1
7	2-April-2021	Dr. Arjun Ramakrishnan	Do we always make optimal decisions? A sneak peek at what might come in the way.	3	2
8	20-April-2021	Dr. Kapudeep Karmakar	Free-living life cycle of human pathogens and how to break it	5	27
9	21-April-2021	Dr. Rachit Agarwal	Rapamycin-loaded microparticles for osteoarthritis treatment	4	2
10	25-May-2021	Dr. Almir Badnjevic	Legal Metrology Framework for Medical Devices	5	6
11	6-Jul-2021	Dr. Michela Chiappalone	Neurons in the loop: from neurorobotics to neuroprosthetics	7	28

IEEE Computer Society (CS) Student Branch Chapter (Geo Code - SBC20461D)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	21-February-2021	Dr. Arif Ahmed	Introduction to Docker with Hands-on Experience	26	25
2	27-February-2021	Prof. Neelesh B. Mehta	New System Design Challenges in Implementing Full-Duplex Communications in Next Generation Wireless Networks	20	32
3	15-Mar-2021	Prof. Tulika Mitra	Software-Defined Accelerators for Edge Computing	22	14
4	24-Mar-2021	Prof. Walid Saad	Distributed Machine Learning in Wireless Networks: Challenges and Opportunities	21	24
5	8-Apr-2021	Prof. Madhusudan Singh	Blockchain Technology in Digital Transformation Era	21	24
6	10-May-2021	Dr. Malek Ben Salem	Building and Operating Trustworthy AI	19	23
7	27-Jul-2021	Dr. Dwarikanath Mahapatra	Self Supervised Learning For Histopathology Image Analysis	13	19
8	25-Sep-2021	Devarpita Sinha	Guidance on Industry Research Career in the new normal	12	12
9	25-Sep-2021	Aritra Chatterjee	Guidance on Industry Research Career in the new normal	12	12
10	26-Sep-2021	Ayan Mondal	Guidance on Academic Research Career in the new normal	15	11
11	26-Sep-2021	Arijit Roy	Guidance on Academic Research Career in the new normal	15	11
12	26-Sep-2021	Sangita Dhara	Guidance on Academic Research Career in the new normal	15	11
13	2-Oct-2021	Ketan K.	Extremator: An introduction to IEEEExtreme	13	7
14	3-Oct-2021	Shivam Abhilash	Benefits of Volunteering with IEEE Computer Society	13	7
15	9-Oct-2021	Dr. Arpan Pal	Workshop: Embedded AI @ Edge	13	10
16	9-Oct-2021	Gitesh Kulkarni	Workshop: Embedded AI @ Edge	13	10
17	9-Oct-2021	Swarnava Dey	Workshop: Embedded AI @ Edge	13	10

IEEE Student Branch of Haldia Institute of Technology (Geo Code - STB66361)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	8-Mar-2021	Kumar Pranshu, Mouli Biswas	Online Quiz	14	60
2	27-Jun-2021, 4-Jul-2021		Tech-Expo (think technically present surprisingly)	14	75
3	18-Jul-2021	Akshit Priyesh	Data Science and its scopes in the professional world.	14	150
4	17-Sep-2021	Mr. NAYAN MANNA, Dr. PRATYAY KONAR	Workshop on Network Simulation	5	7
5	18-Sep-2021	Dr. PALAS PAL, Mr. BANDHIDHARI SAMANTA	Workshop on Network Simulation	4	6
6	30-Oct-2021-31-Oct-2021	Aditya Kameswara Rao Nadula	Workshop on Latex	16	53

B6. Affinity Group Activities:

Total number of Affinity Groups in the Section: **2**

Number of Affinity Groups formed in the current year: **0**

Affinity Group level activities

IEEE Women in Engineering (WiE) Affinity Group (Geo Code - WE00155)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	10 Mar 2021	Usha Rengaraju	Detecting Melanoma from lesion images using Deep Learning	10	12
2	11 Mar 2021	Swati Chakrabarty	Role of assistive technology and how as engineers we can lay a role in developing technologies to access accessibility and inclusion	12	78
3	22 Apr 2021	Maggie Inbamuthiah	Catch them young: Integrating gender sensitivity and inclusion in education	4	20
4	23 May 2021	Sayatan Datta	Gender Equality, Not just a term, part of our effort towards a more inclusive STEM	12	37
5	06 Jun 2021	Neysara Rai	Webinar on the need for inclusion in STEM	10	46
6	27 Jun 2021	Manjira Sinha	Sohojpath Workshop: Online Education Transforming Classroom Education to E-Learning	5	53
7	03 Sep 2021	Hima Patel and Ruhi Sharma Mitta	Hands-on session on making your data ready for AI	6	

IEEE Young Professional (YP) Affinity Group (Geo Code - YP00155)

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	29 Jan 2021	Prof. Zouheir Rezki	Optical Wireless Communications: Secrecy and Learning-Based Design	9	6
2	06 Feb 2021	Mr. Sumanth Bhutoria	3D Bio-Printing - Revolutionizing Healthcare and Medicine	6	5
3	18 Feb 2021	Dr Debapratim Ghosh	Broadband and multi-section testset design for RF S-parameter measurements	15	4
4	20 Feb 2021	Mr. Dipak Basu	Social Entrepreneurship	6	10
5	23 Apr 2021	Dr. Sandeep Kumar	Framework for Structured Graph Learning via Spectral Approaches	6	7
6	14 May 2021	Dr. Sourav Bhattacharya	Accelerating Deep Neural Networks for Efficient On-Device Runtimes	10	4
7	21 May 2021	Prof. Sandip Das	Next-Generation Fronthaul and Backhaul architectures for Converged access Networks in 5G and Beyond	9	12
8	18 Jun 2021	Dr. Amit Shah	Applications of Digital Health Technology in Cardiovascular Disease Prevention	13	3
9	19 Jun 2021	Mrs. Radha Basu	Artificial Intelligence for societal applications -- Inclusive workforce and technologies	4	5
10	12 Jul 2021	Prof. Max Little	Causal bootstrapping: plug-in interventional machine learning	12	10
11	20 Sep 2021	Mr. Aditya Kameswara Rao Nandula	Basics of Computers and Online Education	2	44
12	3 Oct -to 5 Oct, 2021	Susan K. (Kathy) Land, Deepak Mathur and Many Renowned IEEE Members	IEEE Day 2021: IEEE Kharagpur Section Meetup	105	5
13	13 Nov 2021	Dr. Roshan Kumar Hota and Dr. Pradip Kumar Barik	Inaugural "Scholars' Canvas" Session: Double Header Talks	10	2

B7. Awards & Recognition Activities in 2021:

- IEEE Fellow: Prof. Sudip Misra (CSE department, IIT Kharagpur)
- Prof. Sudip Misra received the IEEE India Council Outstanding Volunteer Award, 2021.
- IEEE MTTTS Pre Graduate Scholarship: Mr. Pallab Kumar Gogoi (ECE department, IIT Kharagpur), Award of 1500 \$ and a additional travel grant of 1000 \$,
- IEEE MTTTS Outstanding Student Chapter Award: AP-MTTTS SBC IIT Kharagpur
- IEEE Darrel Chong Student Activity Award: AP-MTTTS SBC IIT Kharagpur, IEEE SBC
- IEEE SIGHT Funding: AP-MTTTS SBC IIT Kharagpur, 2500 \$ for establishment of Electronic Hobby hub in remote places in Assam.
- IEEE TENCON 2021 Robot Design Competition Bronze medal: Mr. Anup Sharma (ECE department, Dibrugarh University)
- Membership Growth Reward: SPS, IEEE, IIT Kharagpur, additional fund of 500 \$.
- Senior Member Elevation for Prof. Dipankar Debnath.

B7. Communication Activities:

Regular e-mails were sent to all the section members informing them about seminar notices, conference announcements, India Council and R10 events and membership renewal dates.

B8. Industry Relations

Regular invitations were sent to leading professionals from different industries to invite them as speakers for our sections. The corresponding seminar notices were sent to the member informing the topics, schedules and biodata of the speakers. Feedback was also collected from the members to organize thematic sessions. This was coordinated by our new Chair of Industry Relations.

Sl.	Date	Speaker	Topic	Attendance	
				IEEE	Non IEEE
1	05 Jul 2021	Dr. Dibyendu Das	DEEP-LEARNING BASED COMPILER OPTIMIZATIONS	14	5
2	08 Jul 2021	Dr. Sriram Rajamani	MODELS AND PROGRAMS: BETTER TOGETHER	12	11
3	15 Jul 2021	Dr. Vinayak Honkote	DISTRIBUTED AUTONOMOUS SYSTEMS: CHALLENGES, STATE-OF-THE-ART, AND IMPLEMENTATION INSIGHTS - A HARDWARE PERSPECTIVE	8	2
4	02 Aug 2021	Dr. Soumya Bose	BATTERIES NOT INCLUDED: INTEGRATED CIRCUITS FOR SELF-POWERED PORTABLE AND WEARABLE SENSING SYSTEMS	7	3

B9. Humanitarian Technology Activities:

Owing to the unexpected psychological effects of the pandemic (COVID 2019) like fear, sadness, anger etc., that is being witnessed by the students, which as evidence suggests is causing a serious concern for their emotional and social wellness and therefore needs attention. In view of the effects that can loom large in the future, the IEEE Kharagpur Section and Student Branch organized a series of 5 webinars on "Adaptation in the New Normal Guidance and Awareness". The students and teachers of several schools from Kolkata, Kharagpur, Hyderabad, Lucknow participated in the webinars. The following are the details:

Sl. No.	Date	Speaker	Topic	Attendance	
				IEEE	Non-IEEE
1.	07.08.2021	Mrs. Juliet Karmakar Mondol	Behaviour Modification of Children and Adults	10	90
2.	14.08.2022	Dr. Sumit Mazumdar,	The uncertain era of coronavirus pandemic - what we need to be worried about, and what to be not?	8	30
3.	21.08.2022	Mrs. Juliet Karmakar Mondol	Teachers Communication and Verbal Requisites during Online Teaching	6	30
4:	28.08.2022	Dr. Gayatri Mukherjee	The world's most efficient army: our immune system	8	80
5	04.09.21	Dr. Anuradha Choudhary	Inner Vaccines	5	20

B10. Community Activities:

IEEE SIGHT Funding received by AP-MTTS SBC IIT Kharagpur, of US\$ 2500 which was used for establishing an Electronic Hobby Hub in remote places in Assam.

C. OTHERS**C1. Special Events**

- IEEE Xtreme event

C2. Relationship with National and International Societies and Non-Government Organizations (NGO)

- Kshitij 2021 (Techno-management festival of IIT Kharagpur)
- Technology Robotix Society of IIT Kharagpur

C3. Collaboration with other IEEE Sections

- Sri Lanka Section
- Central Region sub-section Sri Lanka

C4. Support extended to Sub-sections & Society Chapters within the Section

All financial transactions, seed grants and special opportunities grants facilitated, audited and managed by the section for following OUs

- IEEE Control Systems Society (CSS) Chapter (CH10150)
- IEEE Engineering in Medicine and Biology Society (EMBS) Chapter (CH10723)
- IEEE Signal Processing Society (SPS) Chapter (CH10742)
- IEEE Women in Engineering (WiE) Affinity Group (WE00155)
- IEEE Young Professional (YP) Affinity Group (YP00155)
- IEEE Student Branch of IIT Kharagpur (STB20461)
 - IEEE Signal Processing Society (SPS) Student Branch Chapter (SBC20461A)
 - IEEE Antenna and Propagation Society (APS) and Microwave Theory and Techniques Society (MTTS) Joint (AP-MTTS) Student Branch Chapter (SBC20461B)
 - IEEE Engineering in Medicine and Biology Society (EMBS) Student Branch Chapter (SBC20461C)
 - IEEE Computer Society (CS) Student Branch Chapter (SBC20461D)

Shipping of all speaker mementos now processed through a single window process.

C5. Joint activities for membership development:

- Mentored the formation of IEEE SB at Vinoba Bhave University Hazaribagh, JH.
- Membership development in the vicinity of Kharagpur section in Tatanagar, Ranchi and Hazaribagh

C6. Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

- Regular administrative meeting and joint meeting involving all OUs and drawing of charters in joint consultations
- Coordinated all OU monthly meetings helped us meet the targets of all OUs to keep their vitality index good.
- Regularly high level technical talks are organized whenever some domain expert visits IIT Kharagpur

C7. Problems anticipated and suggestions for solutions, if any

- Spare time with officers for section and chapter activities is decreasing fast. Need to motivate young volunteers capable of dedicated enough time for section level activities.

PART D - GOALS AND PLANS

D1. Continuation of project/activity in progress and their implementation plans

- 11th International Conference on Computing, Communication and Networking Technologies (ICCCNT)

D2. Goals and Future Plans

- To increase membership by reaching out to new faculty members and new students of IIT Kharagpur.
- To revive HIT SB activity and create their sustainability plan
- To start Community activity of the section by initiating a TISS (Teacher in Service Scheme) with IIT Kharagpur campus schools.
- To organize TechSym with the help of IIT Kharagpur student branch
- To work with MGA in order to explore options of expanding territory of the section.
- To increase members under Section and OUs
- To increase number of members in IC
- Renewal of Section under WB Societies Registration Act

D3. Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

- Membership boot camp at regular intervals and to address the benefits to students mainly from the second year of their undergraduate studies

D4. Business Plan for Sustainable Growth and Financial Stability

- To work with MGA in order to explore options of expanding territory of the section.
- Increase drive for professional members in the Hubs of Haldia, and from increase in geo territory as well include members from new areas.
- Conduct Financially Sponsored conference in order to improve the financial health of the section, and provide enriched member benefits.

**IEEE Kharagpur Section
Annual General Meeting for the Year 2020
(01 Jan. 2020-31 Dec. 2020)**

Minutes of the Meeting held on March 11, 2021

Venue: Online via Google Meet (<https://meet.google.com/wbx-yycr-sio>)

Convenor and Host of the Meeting: Secretary, 2020, Prof. Debdoot Sheet

1. The attendance was recorded and with sufficient quorum the meeting was convened at 7:00 PM.
2. Welcome address was delivered by Chair, 2020, Prof. Debarati Sen.
3. Minutes of AGM 2019 were presented by Secretary, 2019, Prof. Sudip Misra and the house accepted the minutes with a voice vote.
4. Annual Organizational Report, 2020 of the Section was presented by Chair, 2020, Prof. Debarati Sen
5. Financial Report, 2020 of the Section was presented by the Treasurer, 2020, Prof. Sanjay K Chaturvedi. He also appraised the status of closure of the bank accounts of the OUs within the Section and transfer of their unspent balance in bank account to the Section Bank Account.
6. Annual Report, 2020 of the IEEE Signal Processing Society (SPS) Section Chapter was presented by Chair, 2020, SPS Chapter, Prof. Sudipta Mukhopadhyay.
7. Annual Report, 2020 of the IEEE Control Signal Society (CSS) Section Chapter was presented by Chair, 2020, CS Chapter, Prof. Alok Kanti Deb.
8. Annual Report, 2020 of the IEEE Engineering in Medicine and Biology Society (EMBS) Section Chapter was presented by Chair, 2020, EMBS Chapter, Prof. Sudip Nag.
9. Annual Report, 2020 of the Presentation of IEEE Women in Engineering (WiE) Affinity Group as presented by Chair, 2020, WiE AG, Prof. Manjira Sinha.
10. Annual Report, 2020 of the IEEE Young Professionals (YP) Affinity Group was presented by Vice Chair, 2020, YP AG, Mr. Aditya K. Rao.
11. Annual Report, 2020 of the IIT Kharagpur Student Branch (IITKgp SB) was presented by Chair, 2020, IITKgp SB, Ms. Devarpita Sinha and welcome to the incoming slate.
12. Annual Report, 2020 of the IEEE Antenna and Propagation / Microwave Theory and Technique Society Joint Student Branch Chapter (AP-MTTS-SBC) was presented by Chair, 2020, AP-MTTS-SBC, Mr. Anirban Sengupta and welcome to the incoming slate.
13. Annual Report, 2020 of the IEEE Signal Processing Society Student Branch Chapter (SPS-SBC) was presented by Chair, 2020, SPS-SBC, Md. Ismail Yasar Arafath and welcome to the incoming slate.
14. Annual Report, 2020 of the IEEE Engineering in Medicine and Biology Society Student Branch Chapter (EMBS-SBC) was presented by Chair, 2020, EMBS-SBC, Mr. Chiranjib Bhowmick and welcome to the incoming slate.
15. Annual Report, 2020 of the IEEE Computer Society Student Branch Chapter (CS-SBC) was presented by Chair, 2020, CS-SBC, Ms. Arpita Dutta and welcome to the incoming slate.
16. Annual Report, 2020 of the Haldia Institute of Technology (HIT) Student Branch was presented by the Chair, 2020 and welcome to the incoming slate.
17. New slate of officers of the IEEE Kharagpur Section and constituent OU was introduced by the Nomination Committee Chair, 2021, Prof. Shailendra Kumar Varshney.
18. Process for handover of charges was completed virtually.
19. Presentation of Mementoes to outgoing office bearers.
20. Presentation of Vote of Thanks by Secretary, 2020, Prof. Debdoot Sheet and adjournment of the meeting.

IEEE Kharagpur Section

Agenda of the Annual General Meeting (AGM) 2021 (on 02.03.2022)

(Host and Convenor: Secretary, 2021, Prof. Mrinal Kanti Mandal)

Date: Wed, 2 March 2022, Time: 5:30 PM - 7:00 PM

Hybrid Meeting: Section Officers meet at IEEE Office in NA203, Nalanda Admin Complex,

Others to join virtually on WebEx:

<https://ieeemeetings.webex.com/ieeemeetings/j.php?MTID=m9c08e5adb83717e99e585c6a0ff58bf4>

Meeting number: 2539 027 9381

Meeting password: 4FmGGXqiJ67

1. Attendance
2. Welcome address by Chair, 2021, Prof. Sudip Misra
3. Presentation of Minutes of AGM 2020 by Secretary, 2020, Prof. Debdoot Sheet
4. Presentation of IEEE Kharagpur Section Annual Organizational Report, 2021 by Chair, 2021, Prof. Sudip Misra
5. Presentation of IEEE Kharagpur Section Financial Report, 2021 by Treasurer, 2021, Prof. Dipankar Debnath
6. Presentation of IEEE Signal Processing Society (SPS) Kharagpur Section Chapter Annual Report, 2021 by SPS Chapter Chair, 2021, Prof. Sudipta Mukhopadhyay
7. Presentation of IEEE Control System Society (CSS) Kharagpur Section Chapter Annual Report, 2021 by CSS Chapter Chair, 2021, Prof. Ashish Ranjan Hota
8. Presentation of IEEE Engineering in Medicine and Biology Society (EMBS) Kharagpur Section Chapter Annual Report, 2021 by EMBS Chapter Chair, 2021, Prof. Sudip Nag
9. Presentation of IEEE Women in Engineering (WIE) Kharagpur Section Affinity Group Annual Report, 2021 by WIE Affinity Group Chair, 2021, Prof. Manjira Sinha
10. Presentation of IEEE Young Professionals (YP) Kharagpur Section Affinity Group Annual Report, 2021 by YP Affinity Group Chair, 2021, Prof. Amitalok J Budkuley
11. Presentation of IEEE IIT Kharagpur Student Branch (IITKgp SB) Report, 2021 by SB Chair, 2021, Ms. Nidhi Pathak and welcome to the incoming slate.
12. Presentation of IEEE Signal Processing Society (SPS) IIT Kharagpur Student Branch Chapter Annual Report, 2021 by SPS SBC Chair, Mr. Rahul Mahadik and welcome to the incoming slate.
13. Presentation of IEEE Antenna and Propagation Society and Microwave Theory and Technique Society (AP-MTTS) IIT Kharagpur Student Branch Chapter Annual Report, 2021 by AP-MTTS SBC Chair, 2021 Ms. Prajakta Sathe and welcome to the incoming slate.
14. Presentation of IEEE Engineering in Medicine and Biology Society (EMBS) IIT Kharagpur Student Branch Chapter Annual Report, 2021 by EMBS SBC Chair, 2021 Ms. Poulomi Pal and welcome to the incoming slate.
15. Presentation of IEEE Computer Society (CS) IIT Kharagpur Student Branch Chapter Annual Report, 2021 by CS SBC Chair, 2021 Ms. Aishwariya Chakraborty and welcome to incoming slate.
16. Presentation of IEEE Haldia Institute of Technology Student Branch (HIT SB) Report, 2021 by SB Chair, 2021.
17. Presentation of new slate of IEEE Kharagpur Section and constituent OU office bearers for 2022 by Nomination Committee Chair, 2022, Prof. Debarati Sen
18. Handover of Charges
19. Presentation of Vote of Thanks by Secretary, 2021, Prof. Mrinal Kanti Mandal