

# NEWSLETTER

4<sup>th</sup> Quarter

October '24 to December '24

**IEEE**  

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**KOLKATA SECTION**

# IEEE

## KOLKATA SECTION



*Dear IEEE Kolkata Section Members, Greetings!!*

It is my pleasure to present you the Quarter-4 Kolkata Section Newsletter. Quarter-4 period i.e. October to December 2024 witnessed a lot many major events like the Sir C.V. Raman Milestone Commemorative Lecture, IEEE Kolkata Section Student Congress, CALCON-2024, CATCON-2024. Dr. Tridibesh Nag, Secretary Kolkata Section attended Section Chapter Confluence at Singapore on 2nd & 3rd. December, 2024 organized by R10.

Sir C.V. Raman Milestone Commemorative Lecture was delivered by Naresh Dadhich on 18th November 2024 at Dr. Triguna Sen Auditorium, Jadavpur University. IEEE Kolkata Section Student Congress was organised in association with The Heritage Institute of Technology, Kolkata. Dignitaries like Sri. P.K. Agarwal, CEO Kalyan Bharti Trust & Prof. (Dr.) Basab Chaudhuri, Principal The Heritage Institute Of Technology, Kolkata attended the event. The Sessions were conducted by Dr. Sudeendra Koushik and Mr. S. Debsarma Biswas, Director Generation, WBSEDCL. Another important event i.e. Kolkata Section LMAG organised a technical lecture on 28th November, 2024.

In the next quarter ie the first quarter of 2025 we have planned to organise Student Hackathon by JU Student Branch. We also encourage other student branches to organize similar hackathon contest. Like last year, we have also planned to launch IEEE Kolkata Section Robotic Competition. An important event in the next quarter is AGM-2024 scheduled on 15th January, 2025.

Overall, 2024 has been a successful year for IEEE Kolkata Section. We could plan and execute all the events in a professional manner. This has been possible due a team of volunteers who were motivated & dedicated. My special thanks to all the members of the executive committee, volunteers and other stakeholders.

I once again thank all the members for their wholehearted support and cooperation and looking forward to another interesting edition of newsletter in the first quarter of 2025. I wish to place a special thanks to the Section newsletter team for the efforts which went behind this edition. Your feedback will be of great help to us, do send us your comments to [pramanikankita@gmail.com](mailto:pramanikankita@gmail.com)

Sd/-

**Prof. Suparna Kar Chowdhury,**  
Chair, Kolkata Section



## IEEE Kolkata Section

### Name of Event: IEEE Kolkata Section Student Congress 2024

The IEEE Kolkata Section, in collaboration with Heritage Institute of Technology (HITK), organized the “Student Congress” on 16th November 2024 at HITK. The event focused on the theme “Transitioning from Student to Young Professional” and aimed to provide students with insights into career development, innovation, and industry expectations.

The event commenced with an inaugural session where Prof. Suparna Kar Chowdhury, Chairperson of IEEE Kolkata Section, delivered the welcome address. She also felicitated the Chief Guest, Shri P. K. Agarwal, CEO of Kalyan Bharti Trust, the Guest of Honor, Prof. Basab Chaudhuri, Principal of HITK, and the esteemed speakers, Dr. Sudeendra Thirtha Koushik and Mr. SubhasankarDebsarma Biswas. Shri P. K. Agarwal and Prof. Basab Chaudhuri addressed the students, encouraging them to actively engage in IEEE programs to enhance their technical and professional skills.

This was followed by the lecture sessions. The first lecture was delivered by Dr. Sudeendra Tirtha Koushik, Founder and Chief Innovator of Innovation by Design. He spoke on Startups and Innovations, highlighting the importance of creativity and entrepreneurial thinking. The speaker for the second lecture session was Mr. SubhasankarDebsarma Biswas, Director (Generation) at WBSEDCL. He provided valuable insights into industry requirements and the evolving expectations from young professionals.

At the end of the lecture sessions, Prof. Suparna Kar Chowdhury presented mementos to the speakers as a token of appreciation. The event concluded with a vote of thanks delivered by Dr. Tridibesh Nag, expressing gratitude to all dignitaries, speakers, and attendees for making the event a success.

The IEEE Student Congress 2024 provided an enriching experience for students, bridging the gap between academia and industry, and motivating them to take proactive steps in their professional journey.



(L) Inaugural Session of the Student Congress  
(R) Student Delegates at the Congress

### Name of the Event: Report on Sir C.V. Raman Milestone Commemorative Lecture

IEEE Kolkata Section organized the Sir C.V. Raman Milestone Commemorative Lecture on 18th November 2024 at Dr. Triguna Sen Auditorium, Jadavpur University Campus. The Theme of the lecture was 'Unified View of the Basic Forces.' Prof. Naresh Dadhich, Emeritus Professor, IUCAA, Pune delivered the prestigious 'Sir C.V. Raman Milestone Commemorative' lecture. The session was chaired by Prof. Debatosh Guha, Past Chair of IEEE Kolkata Section.

The event started with Prof. Suparna Kar Chowdhury, Chairperson of the IEEE Kolkata Section delivering the welcome address. In her address, she dwelt on the activities of the Kolkata Section and the importance of the groundbreaking research work of Sir C.V. Raman on the scattering of light waves leading to the Nobel Prize in 1930. After her address, she felicitated Chief Guest, Prof. Bhaskar Gupta, Vice Chancellor, Jadavpur University, Prof. Naresh Dadhich, the speaker and Prof. Debatosh Guha Session Chair. Prof. Naresh Dadhich spoke on various aspects of the basic forces and concluded with the fact that the basic forces have a common unified platform. After the talk, Prof. Suparna Kar Chowdhury, Chairperson Kolkata Section, presented mementos to the guest speaker and the session chair. The vote of thanks for the event was proposed by Dr. Tridibesh Nag.



*Glimpse of the Sir C.V. Raman Milestone Commemorative Lecture*

### Name of Event: CALCON 2024

IEEE Kolkata Section organized its flagship conference CALCON 2024 on 14th and 15th December 2024 in Jadavpur University Campus. The inauguration program of the conference was held at the Dr. H. L. Roy Auditorium of the Institute of Chemical Engineers. Prof. Bhaskar Gupta, Vice Chancellor of Jadavpur

University and Prof. Rajib Bandopadhyay, Dean FET of Jadavpur University were present during the inauguration ceremony.

Over the course of two engaging days, 90 research papers were presented, showcasing a diverse range of ideas and innovations. These papers, contributed by students, research scholars, and faculty members from various institutes across India, covered key domains such as Electrical Engineering, Electronics and Communication Engineering, and Computer Science and Engineering. The presentations were spread across twelve thoughtfully curated sessions.

Keynote lecture sessions by Prof. Asif Ekbal, Professor, School of Artificial Intelligence and Data Science, IIT Jodhpur, Dr. Chandrakanta Kumar, Scientist/Engineer-'G', Project Director Technology & Applications Projects Program Office, U R Rao Satellite Centre, Bangalore and Prof. Kishore Chatterjee, Professor of Electrical Engineering, IIT Bombay were organized during the event. Prof. Ekbal delivered a lecture on "Empathetic AI: Teaching Computers Empathy and Politeness". Dr. Kumar spoke on "Deep Space Communication Systems" and Prof. Chatterjee delivered a lecture on "Harvesting of Energy from Solar Photovoltaic System and its Utilization through the Grid".

The first day of CALCON saw an interactive WIE session organised by the WIE Affinity Group of Kolkata section. In this session, Prof. Amit Konar of Jadavpur University delivered the keynote speech on "Brain-Computer Interfacing". A panel discussion on "AI and Sustainability" was also organized in this session.

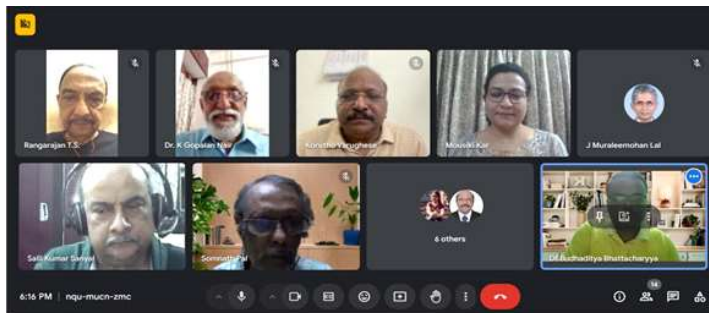
**CALCON 2024 was sponsored by Ericsson.**



*Glimpses of CALCON 2024*

## **Name of Event: Third LMAG Activity of IEEE Kolkata Section in 2024**

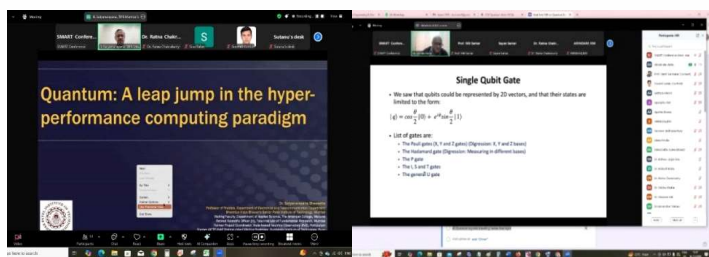
The Third LMAG Activity of IEEE Kolkata Section in 2024 was held virtually on 28th November 2024 from 6:00 pm to 7:30 pm. IEEE LMAG India Council and IEEE LMAG Kolkata Section were the organizers of the event. Dr. Mousiki Kar, Associate Professor, Department of ECE, Heritage Institute of Technology, Kolkata spoke on "Semiconductor Technology shaping the future" during the event. The talk explored the pivotal role of transistor scaling in enabling unprecedented levels of performance, energy efficiency, and device miniaturization. A total of 19 IEEE Members and 6 Guests attended the event.



*Some participants in the online LMAG Program*

## **Name of the Event: FDP on "Quantum Enabled Science and Technology" (QuEST)**

An online Faculty Development Program on "Quantum Enabled Science and Technology" (QuEST) was organized from 9th -13th December, 2024 by IEM Kolkata. The event was technically sponsored by IEEE Women in Engineering (WIE) Kolkata Affinity Group. Dr. Satyanarayana. Beesette, Former scientific officer, TIFR, Mumbai, Dr. Debanjan Konar, Senior Chief Engineer/Staff Engineer (Quantum AI) at Samsung Research (SRIB), Dr. Debabrato Dutta, former scientist, Bhabha Atomic Research Centre (BARC), Dr. Guruprasad Kar, Professor of Indian Statistical Institute (ISI), Kolkata and Dr. Nayana Das Researcher, LTI Mindtree were the resource persons for the event. A total of 60 participants including 10 IEEE members took part in the event. The event empowered the faculty members in the emerging field of Quantum Enabled Science and Technology, inspiring them to contribute effectively to education, research, and innovation in this domain.



*Screenshot of Quantum Enabled Science and Technology (QuEST)*



## **Name of the Event: 2024 IEEE 7th International Conference on Condition Assessment Techniques in Electrical Systems (IEEE CATCON 2024)**

The seventh edition of IEEE CATCON was successfully held at Jadavpur University, Kolkata, from November 22 to 24, 2024. Since its inception in 2013, IEEE CATCON has established itself as a premier platform for advancing condition assessment techniques in electrical systems. This year's offline format fostered meaningful discussions and networking opportunities. The conference opened with an insightful keynote address by Mr. Dinesh K. Singh, Executive Director (System) of Damodar Valley Corporation, emphasizing challenges and innovations in system reliability.

IEEE CATCON 2024 received 141 paper submissions, with a competitive 43% acceptance rate (61 papers). These were presented in 12 technical sessions across four specialized tracks, chaired by eminent professors from leading institutes namely Prof. L. Satish, IISc Bangalore, Prof. Amitava Chatterjee, Jadavpur University, Prof. C. C. Reddy, IIT Ropar, and Prof. Rajarshi Gupta, University of Calcutta. Industry participation was a key highlight, with 15 major companies-Damodar Valley Corporation, Larsen & Toubro Ltd., Exide Industries Ltd., Power Grid Corporation of India Ltd., NTPC Ltd., Megger India Pvt. Ltd., Doble Engineering Pvt. Ltd., Omicron Energy Solutions Pvt. Ltd., Magnewin Energy Pvt. Ltd., Polycab India Ltd., Shreem Electric Ltd., MRTG Power Diagnostic Tests Pvt. Ltd., Neo Tele-Tronix Pvt. Ltd.,

The event featured two tutorials, three plenary talks, and four industry sessions, covering cutting-edge advancements in AI, machine learning, and interdisciplinary applications. Special lectures, including one by Prof. C. C. Reddy (IIT Ropar), and social gatherings like the DEIS YP dinner and the Conference Dinner at Princeton Club, enhanced engagement and collaboration.

IEEE CATCON 2024 concluded with a valedictory session, marking a milestone in knowledge exchange and innovation. IIT (ISM) Dhanbad will host the next edition, ensuring continued excellence in the field.

Physical Acoustics India Pvt. Ltd., and Rectifiers& Electronics Pvt. Ltd., joining as sponsors and partners. Their active involvement bridged academia and industry, enriching discussions with practical insights.



*Glimpses of IEEE CATCON 2024*