



**IEEE EDS Mini-Colloquium &
4th International Conference on Micro/Nanoelectronics Devices, Circuits, and Systems (MNDCS-2024) (Hybrid Mode)
Date: 29-31 Jan 2024**

Program Schedule

The time as per IST (Indian Standard Time)

Date/Time	DAY-1 Date: 29 th Jan 2024 (Monday)
Registration 08:30-09:00 AM	Registration of Participants Venue: Room No. EC-23, Dept. of ECE
Date: 29 th Jan 2024 (Monday) EDS DL Talk 1 (9:00 AM-10:00 AM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Brajesh Kumar Kaushik, IIT Roorkee, India Title: Spintronics- Perspectives and Challenges Email: bkk23fec@iitr.ac.in Chair: Dr. T. R. Lenka Email: trlenka@ece.nits.ac.in
Date: 29 th Jan 2024 (Monday) (10:00 AM-11:00 AM) Inauguration	Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Moderators: Volunteers Chief Patron: Prof. Dilip Kumar Baidya (Director NITS) Guest: Prof. N. B. Dev Choudhury (Dean R&C), and Prof. S. S. Dhar (Dean SW) Patrons: Dr. Koushik Guha (HoD-ECE), Prof. F. A. Talukdar, and Prof. S. Baishya EDS DLs: Dr. M. K. Radhakrishnan, and Prof. B.K. Kaushik General Chair: Dr. Samar Saha (Online), General Co-Chair: Dr. Jacopo Iannacci (Online) & Organizing Chairs: Dr. K. Guha & Dr. T. R. Lenka Vote of Thanks: Ms. Samadrita Das (Student Chair)
Tea Break	High Tea
Date: 29 th Jan 2024 (Monday) EDS DL Talk 2 (11:30 AM-12:30 PM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. M. K. Radhakrishnan, Nanorel Title: Semiconductor Device Evolution- Last 120 Years, Digital Age and Sustainability Email: radhakrishnan@ieee.org Chair: Dr. T. R. Lenka

	Email: trlenka@ece.nits.ac.in	
Date: 29th Jan 2024 (Monday) EDS DL Talk 3 (12:30-1:30 PM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Manoj Saxena, Delhi University, India Title: TBA Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in	
Lunch Break (1:30 - 2:30 PM)	Lunch Break	
Date: 29th Jan 2024 (Monday) EDS DL Talk 4 (2:30-3:00 PM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (Virtual) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Enrico Sangiorgi, University of Bologna, Italy Title: GaN power transistors: Applications and Reliability Issues Chair: Dr. T. R. Lenka Email: trlenka@ece.nits.ac.in	
Date: 29th Jan 2024 (Monday) EDS DL Talk 5 (3:00-3:30 PM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (Virtual) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Enrique Miranda, Universitat Autònoma de Barcelona, Spain Title: Compact Modeling of Memristive Devices for Neuromorphic Computing Chair: Dr. S. K. Tripathy Email: sktripathy@ece.nits.ac.in	
Closing of EDS MQ	Closing of EDS MQ	
Tea Break	High Tea	
Date: 29th Jan 2024 (Monday) Track 1 and 2 (Micro/Nano Devices) (3:30-5:00 PM)	Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Track 1 (Micro/Nano Devices) Paper Ids: [53, 55, 63, 64, 65] Chair: Dr. Manash Chanda, MSIT, Kolkata Email: manash.bst@gmail.com Co-Chair: Dr. Ujjal Chakraborty, NIT Silchar Email: ujjal@ece.nits.ac.in Coordinator: Dr. Bijit Choudhuri, NIT Silchar Email: bijitchoudhuri@ece.nits.ac.in Volunteer: G. Purnachandra Rao (PhD Scholar) Email: gpurna_rs@ece.nits.ac.in	ECE Dept. Seminar Hall (Hybrid) Google Meet Link: https://meet.google.com/uni-roxk-fwn Track 2 (Micro/Nano Devices) Paper Ids: [51, 66, 71, 88, 89] Chair: Prof. D. Nirmal, Karunya University, India Email: nirmal@karunya.edu Co-Chair: Dr. Kumar Prasannajit Pradhan, IIITDM, Kancheepuram Email: kppradhan@iiitdm.ac.in Coordinator: Dr. M. Kavicharan, NIT Silchar Email: kavicharan@ece.nits.ac.in Volunteer: Rabin Paul (PhD Scholar) Email: rabin_rs@ece.nits.ac.in
Date/Time	DAY-2 Date: 30th Jan 2024 (Tuesday)	

<p>Date: 30th Jan 2024 (Tuesday) Invited Talk 1 (9:00 AM-10:00 AM)</p>	<p style="text-align: center;">(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Saptarshi Das, Penn State University, USA Email: das.sapt@gmail.com Title: 3D Integration of 2D Devices for Advanced Memory, Logic, and Bio-inspired Computing Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in</p>	
<p>Date: 30th Jan 2024 (Tuesday) Invited Talk 2 (10:00 AM-11:00 AM)</p>	<p style="text-align: center;">(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. Vinayak Pachkawade, VPACHKADE Research Center, Pune Email: vinayak@vpachkawade.com Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in</p>	
<p>Date: 30th Jan 2024 (Tuesday) Invited Talk 3 (11:00 AM-12:00 PM)</p>	<p style="text-align: center;">(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. Aradhana Kumari, STMicroelectronics, Noida Email: aradhana.kumari01@st.com Title: Challenges and Design Techniques for Next Generation Time Interleaved Analog to Digital Converters Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in</p>	
<p>Date: 30th Jan 2024 (Tuesday) Track 3 & 4 (Micro/Nano Circuits) (12:00-01:30 PM)</p>	<p style="text-align: center;">Virtual Hall (Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Track 3 (Micro/Nano Devices) Paper Ids: [1, 3, 21, 27, 30, 31] Chair: Prof. S. K. Gupta, MNNIT, Allahabad Email: skg@mnnit.ac.in Co-Chair: Dr. Shivendra Kumar Pandey, Dept. of EIE, NIT Silchar Email: skpandey@ei.nits.ac.in Coordinator: Dr. Bijit Choudhuri, NIT Silchar Email: bijitchoudhuri@ece.nits.ac.in Volunteer: Ms. Malvika (PhD Scholar) Email: malvika_rs@ece.nits.ac.in</p>	<p style="text-align: center;">ECE Dept. Seminar Hall (Hybrid) Google Meet Link: https://meet.google.com/uni-roxk-fwn Track 4 (Micro/Nano Devices) Paper Ids: [39, 49, 60, 95, 90, 97] Chair: Prof. K. Srinivasa Rao Email: srinivasakarumuri@gmail.com Co-Chair: Dr. Rupam Goswami, Tezpur University Email: rupam21@tezu.ernet.in Coordinator: Dr. M. Kavicharan, NIT Silchar Email: kavicharan@ece.nits.ac.in Volunteer: Samadrita Das (PhD Scholar) Email: samadrita_rs@ece.nits.ac.in</p>
<p style="text-align: center;">Lunch Break 01:30-02:30 PM</p>	<p style="text-align: center;">Lunch Break</p>	
<p>Date: 30th Jan 2024 (Tuesday) Invited Talk 4 (02:30-03:30 PM)</p>	<p style="text-align: center;">ECE Seminar Hall (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. Abhishek Das, Aliah University, Kolkata Email: adas.us@gmail.com Title: Transition of IoT to IoMT (Internet of Medical Things) Chair: Koushik Guha</p>	

	Email: koushik@ece.nits.ac.in	
Date: 30th Jan 2024 (Tuesday) Track 5 & 6 (Micro/Nano Circuits) (03:30 PM-05:00 PM)	Virtual Hall (Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Track 5 (Micro/Nano Circuits) Paper Ids: [7, 15, 22, 46, 47, 75] Chair: Prof. Naushad Alam, AMU, Aligarh Email: naushad.el@zhcet.ac.in Co-Chair: Dr. Raghunandan Swain, PMEC, Berhampur Email: raghu.etc@pmec.ac.in Coordinator: Dr. Himanshu Karan, NIT Silchar Email: himanshu@ece.nits.ac.in Volunteer: G. Purnachandra Rao (PhD Scholar) Email: gpurna_rs@ece.nits.ac.in	ECE Dept. Seminar Hall (Hybrid) Google Meet Link: https://meet.google.com/uni-roxk-fwn Track 6 (Micro/Nano Circuits) Paper Ids: [57, 91, 92, 93, 94, 9] Chair: Dr. Manash Chanda, MSIT, Kolkata Email: manash.bst@gmail.com Co-Chair: Dr. Sabyasachi Bhattacharyya, BVEC, Karimganj Email: sabya005@gmail.com Coordinator: Dr. M. Kavicharan, NIT Silchar Email: kavicharan@ece.nits.ac.in Volunteer: Rabin Paul (PhD Scholar) Email: rabin_rs@ece.nits.ac.in
Date: 30th Jan 2024 (Tuesday) Invited Talk 5 (5:00-6:00 PM)	(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Dr.-Ing. Ha Duong Ngo, Berlin University of Applied Sciences, Germany Email: HaDuong.Ngo@htw-berlin.de Title: Sensor development for Hydrogen Economy Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in	
Date/Time	DAY-3	
	Date: 31st Jan 2024 (Wednesday)	
Date: 31st Jan 2024 (Wednesday) Invited Talk 6 (09:00 AM-10:00 AM)	ECE Dept. Seminar Hall (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. Manash Chanda, Meghnad Saha Institute of Technology, Kolkata Email: manash.bst@gmail.com Title: Emerging FET Biosensors and their Challenges Chair: Dr. S. K. Tripathy Email: sktripathy@ece.nits.ac.in	
Date: 31st Jan 2024 (Wednesday) Invited Talk 7 (10:00 AM-11:00 AM)	(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Prof. Sergey V. Selishchev, National Research University of Electronic Technology (MIET), Russia Email: selishchev@bms.zone Title: Tendencies in Development of Wearable Blood Purification Devices Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in	
Tea Break	Tea Break	
Date: 31st Jan 2024 (Wednesday) Invited Talk 8	(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Dr. (Mrs.) Jignasa V. Gohel (Solanki), National Institute of Technology Surat	

(11:30 AM-12:00 PM)	<p style="text-align: center;">Email: sjn@ched.svnit.ac.in Title: Organic Photovoltaic Devices: Recent developments for enhanced performance Chair: Dr. S. K. Tripathy Email: sktripathy@ece.nits.ac.in</p>	
<p>Date: 31st Jan 2024 (Wednesday) Track 7 & 8 (Micro/Nano Systems) (12:00-1:30 PM)</p>	<p style="text-align: center;">Virtual Hall (Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Track 7 (Micro/Nano Systems) Paper Ids: [25, 29, 36, 37, 45] Chair: Dr. Jignasa V. Gohel (Solanki), NIT Surat Email: sjn@ched.svnit.ac.in Co-Chair: Dr. Sudarshan Sahoo, EIE, NIT Silchar Email: sudarsan@ei.nits.ac.in Coordinator: Dr. Rajesh Saha, NIT Silchar Email: rajesh@ece.nits.ac.in Volunteer: Bhagyashree Saud (PhD Scholar) Email: bhagyashree21_rs@ece.nits.ac.in</p>	<p style="text-align: center;">ECE Dept. Seminar Hall (Hybrid) Google Meet Link: https://meet.google.com/uni-roxk-fwn Track 8 (Micro/Nano Systems) Paper Ids: [02, 62, 72, 73, 76] Chair: Prof. Angsuman Sarkar, Kalyani GEC, India Email: angsumansarkar@gmail.com Co-Chair: Dr. Arun Ku Sunaniya, EIE, NIT Silchar Email: arun@ei.nits.ac.in Coordinator: Dr. Dipjyoti Das, NIT Silchar Email: dipjyoti@ece.nits.ac.in Volunteer: Samadrita Das (PhD Scholar) Email: samadrita_rs@ece.nits.ac.in</p>
<p style="text-align: center;">Lunch Break 1:30 PM - 2:30 PM</p>	<p>Lunch Break</p>	
<p>Date: 31st Jan 2024 (Wednesday) Invited Talk 9 (2:30-3:30 PM)</p>	<p style="text-align: center;">Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Dr. Pratim Sengupta, Director, Nephrocure India Pvt Ltd Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Email: pratim.sengupta@gmail.com Title: Technology in Nephrocure: Past, Present and Future Chair: Dr. Koushik Guha Email: koushik@ece.nits.ac.in</p>	
<p>Date: 31st Jan 2024 (Wednesday) Track 9 & 10 (Micro/Nano Systems) (3:30 PM-5:00 PM)</p>	<p style="text-align: center;">(Online) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Track 9 (Micro/Nano Systems) Paper Ids: [33, 78, 80, 82, 54] Chair: Dr. Rajdeep Dasgupta, EIE, NIT Silchar Email: rajdeep@ei.nits.ac.in Co-Chair: Dr. G. S. Baghel, NIT Silchar Email: gaurav@ece.nits.ac.in Coordinator: Dr. Rajesh Saha, NIT Silchar Email: rajesh@ece.nits.ac.in Volunteer: G. Purnachandra Rao (PhD Scholar) Email: gpurna_rs@ece.nits.ac.in</p>	<p style="text-align: center;">ECE Dept. Seminar Hall (Hybrid) Google Meet Link: https://meet.google.com/uni-roxk-fwn Track 10 (Micro/Nano Systems) Paper Ids: [43, 48, 77, 83] Chair: Dr. Bhakti Patel, Parul University, Gujarat Email: bhakti.patel270009@paruluniversity.ac.in Co-Chair: Dr. R. Murugan, NIT Silchar Email: murugan.rm@ece.nits.ac.in Coordinator: Dr. Dipjyoti Das, NIT Silchar Email: dipjyoti@ece.nits.ac.in Volunteer: Rabin Paul (PhD Scholar) Email: rabin_rs@ece.nits.ac.in</p>
<p>Date: 31st Jan 2024 (Wednesday) Valedictory (5:30 PM-6:30 PM)</p>	<p style="text-align: center;">Bharat Ratna Dr. Bhupen Hazarika Auditorium (In Person) Google Meet Link: https://meet.google.com/jxc-vpwx-bwf Moderator: Volunteers; Chief Guest: Dr. Pratim Sengupta</p>	

Chief Patron: Prof. Dilip Kumar Baidya (Director NITS)

Patrons: Dr. Koushik Guha (HoD-ECE), Prof. F. A. Talukdar, and Prof. S. Baishya

General Chair: [Dr. Samar Saha \(Online\)](#), **General Co-Chair:** [Dr. Jacopo Iannacci \(Online\)](#) & **Organizing Chair:** Dr. K. Guha & Dr. T. R. Lenka

Vote of Thanks: **Dr. S. K. Tripathy**