

NCC 2023 23 - 26 Feb 2023 // Guwahati



29th National Conference on Communications

Jointly organized by IIT Guwahati, IIT Patna and IIT Ropar



Call for Papers and Submissions

Important Dates Paper Submission Deadline **September 01, 2022** Acceptance Notification November 30, 2022

Camera Ready Submission & Early Bird Registration

December 30, 2022

The National Conference on Communications (NCC) is unarguably the most important national conference of the joint telematics group of IITs and IISc today in the areas of communications, networks and signal processing. In a span of more than two decades, the conference has acquired substantial recognition and has emerged as a forum for interaction and collaboration among researchers from communications, networks and signal processing.

https://event.iitg.ac.in/ncc2023/

The Twenty Ninth National Conference on Communications (NCC-2023) will be jointly organized by Indian Institute of Technology Guwahati, Indian Institute of Technology Patna and Indian Institute of Technology Ropar, during 23–26 February 2023. NCC-2023 will be held in offline mode at IIT Guwahati. The conference will feature technical paper sessions, poster sessions, tutorials, workshops and plenary and invited talks by renowned researchers from around the globe. All accepted and presented papers will be published in the conference proceedings. Prospective authors are encouraged to submit their original research findings to the following and other related areas:

Communications

• 5G/B5G/6G wireless communications

Networking

• 5G/B5G/6G/next-generation

Signal Processing

Organizing Committee

Patron: T. G. Sitharam (IITG)

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Publicity: K. Dhaka (IITG) R. Grover (IITG) Sam Darshi (IITRPR) Udit Satija (IITP)

- Aerial communications
- Cognitive and AI-enabled
- communications
- Communications theory and systems
- Detection, estimation, and
- synchronization techniques
- Device-to-device, M2M, and vehicular communications
- Edge/cloud computing and cachingenabled wireless communications
- Energy harvesting and green communications
- Information and coding theory
- Machine learning/AI- based solutions for wireless communications
- Microwave devices and antennas
- Millimeter-wave and terahertz communications
- Molecular, biological and multi-scale communications
- Optical communications
- Quantum communications and computing
- Satellite and space communications
- Security and privacy issues in
- communications
- Smart grid and powerline communications

- networks
- Big data, machine learning and AI for networks
- Biological networks
- Cloud & fog/edge computing and networking
- Complex networks
- Cyber-physical systems / IoT
- Data center networks
- mmWave, THz, VLC, full duplex communication networks
- Network economics and pricing
- Network measurement and analysis
- Network security and privacy
- Network virtualization
- Networks and services management
- Optical networks and systems
- Quantum networking
- Sensor and ad hoc networks
- Social networks
- Software-defined networking
- Unmanned aerial/terrestrial/ underwater/vehicular networks
- Wireless and wireline networks

- Signal processing for communications
- Image and video signal processing
- including surveillance systems
- Signal processing for security
- Content based indexing
- Radar signal processing
- Adaptive signal processing
- Multimedia applications
- DSP algorithms and architectures
- Speech and audio processing
- Biomedical applications
- Language identification
- Machine learning and deep learning
- Pattern Recognition and
- Representation learning
- Information forensics and security
- Biometrics
- High dimensional signal processing
- Stochastic optimisation
- Sparse signal processing
- Graph signal processing
- Applications in astronomy/ astrophysics

Signal Processing Symposium: Kanan Karthik (IITG) Ribhu Chopra (IITG) Mahesh Kolekar (IITP)

Networking Symposium: Sumanta Gupta (IITP) Satyam Agarwal (IITRPR) Sudhir Kumar (IITP)

Tutorials/Special Session/ Workshops: R. Sinha (IITG) P. Guha (IITG) Manoj B. R. (IITG) Sujata Pal (IITRPR)

Registration: R. Kulkarni (IITG) M. Arrawatia (IITG) D. Sikdar (IITG)

Sponsorship: S. Dandapat (IITG) Ashok Singh Sairam (IITG) A. Sharma (IITRPR) Sreenath J. G. (IITG)

Graduate Student Day: A. Dasgupta (IITG) M. Bhatt (IITG) WIE: H. K. Kapoor (IITG) K. Dhaka (IITG)



Prospective authors are encouraged to submit original technical papers that have not been published or submitted elsewhere for publication in the conference proceedings and for presentation in the conference. Submitted papers in two columns format should be **FOUR to SIX** A4 size pages in length, should use font size no smaller than 10 points, and have margins on all four sides as per the IEEE conference format. All submitted papers will be double blind peer-reviewed for technical content and scope by a technical program committee. The paper submission process will be handled through EDAS at https://ncc2023.edas.info/

Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. Detailed information on technical paper submission, tutorials, workshops, invited talks, accommodation and travel will be posted on the conference website.

Registration charges (tentative):

Non IEEE member INR 16,000 **IEEE** member INR 14,000 Non IEEE student member INR 8,000 INR 7,000 IEEE student member