



MAC2023



Organised at

MNNIT Allahabad, India

In Technical Collaboration with

**Université de Sherbrooke, Canada
&**

Benedict College, Columbia, USA

March 24-26, 2023

CALL FOR PAPERS

The accepted & presented papers of the conference by duly registered authors will be submitted to IEEE Xplore Digital Library for possible publication, after quality check.

The 1st IEEE International Conference on Microwave, Antenna and Communication"- MAC 2023 will be held in Offline/Hybrid mode at MNNIT Allahabad in Sangam city- Prayagraj, U.P., India, during March 24-26, 2023.

The conference aims to offer a platform for researchers, academicians and individuals in the industry and startups to showcase their research innovations, knowledge and vision.

MAC 2023 will include focused track on Young Professionals, Women in Engineering and SIGHT along with technical sessions on recent developments.

The technical sessions will have four tracks covering recent and emerging research topics in the fields of Microwave, Antenna and Communication. Every track will have the following events- a) Paper presentations and best paper awards b) Key Note Lectures c) Special Sessions d) Panel Discussions and e) Technical/Industrial Workshops.

Organised in Offline/Hybrid Mode at:

**Department of Electronics and Communication Engineering,
Motilal Nehru National Institute of Technology Allahabad,
Prayagraj, Uttar Pradesh, India (211004)**



1ST IEEE - INTERNATIONAL CONFERENCE ON MICROWAVE, ANTENNA AND COMMUNICATION

(MARCH 24-26, 2023)

Conference Website: <https://www.ieeemac.org>

Organised in Offline/Hybrid mode at: Electronics and Communication Engineering Department

MNNIT Allahabad, Prayagraj, U.P. India

In Technical Collaboration with

Université de Sherbrooke, Canada &
Benedict College, Columbia, USA



ORGANISING COMMITTEE

Chief Patron:

Prof. Rama Shanker Verma, Director, MNNIT Allahabad, India

Patrons:

Prof. Sudarshan Tiwari, MNNIT Allahabad, India

Prof. Rajeev Tripathi, MNNIT Allahabad, India

Honorary Chairs:

Prof. Sébastien Roy, Université de Sherbrooke, Canada

Prof. Bharat Rawal, Benedict College, Columbia, USA

Prof. R.K. Nagaria, MNNIT Allahabad, India

General Chairs:

Prof. Banmali Rawat, University of Nevada, Reno, USA

Prof. N.P. Pathak, IIT Roorkee, India

Prof. V.S. Tripathi, MNNIT Allahabad, India

Conference Chairs:

Prof. K.P. Ray, DRDO, India

Dr. Somak Bhattacharyya, IIT BHU Varanasi, India

Prof. R.A. Mishra, MNNIT Allahabad, India

Executive Committee:

Prof. Nazanin Bassiri-Gharb, Georgia Institute of Technology, USA

Dr. S.K. Varshney, Adviser/Scientist G, DST, Government of India

Dr. Ramesh K. Gupta, VP, Satellite Network Engineering and Operations, USA

Dr. C.J. Reddy, Business Development at Altair Engineering, Inc. USA

Mr. Evgeny Markin, Richemar LLC, USA

Prof. Andrea Massa, University of Trento, Italy

Dr. Nasimuddin, Institute for Infocomm Research, Singapore

Prof. Ghanshyam Singh, University of Johannesburg, South Africa

Prof. J.A. Ansari, University of Allahabad, India

Prof. Shibani K. Koul, IIT Delhi, India

Mr. Puneet Kumar Mishra, ISRO India

Prof. Yogesh Singh Chauhan, IIT Kanpur, India

Dr. Hongwei (Howard) Liu, ARI & NARI, USA

Dr. Naser Ojaraoudi Parchin, Edinburgh Napier University, UK

Dr. Chandrakanta Kumar, ISRO, India

Dr. Satish Kumar Singh, IIIT Allahabad, India

Dr. Arun Prakash, MNNIT Allahabad, India

Dr. Girish Chandra Tripathi, Sterlite Technologies Limited, India

Dr. Sanjeev Yadav, Women Engineering College Ajmer, India

Dr. Nagendra Prasad Yadav, Hubei Polytechnic University, China

Advisory Committee:

Dr. Goutam Chattopadhyay, JPL, NASA, USA

Dr. Sudhakar Rao, Northrop Grumman Space Systems, USA

Dr. Ajay K. Poddar, Synergy Microwave, NJ, USA

Dr. Leon T. Geter, Benedict College, Columbia, USA

Dr. Anurag K. Srivastava, West Virginia University, Morgantown, USA

Prof. Abhay Karandikar, IIT Kanpur, India

Prof. A.K. Chaturvedi, IIT Roorkee, India

Prof. S.N. Singh, ABV-IIITM Gwalior, India

Prof. Arvind Choubey, IIIT Bhagalpur, India

Prof. Levent Sevgi, ATLAS University, Turkey

Prof. Rocco Pierri, University of Campania Luigi Vanvitelli, Italy

Prof. Sembiam R. Rengarajan, California State University, Northridge, USA

Prof. Omar M Ramahi, University of Waterloo, Canada

Prof. K. Subramanian, IGNOU, India

Prof. M.V. Kartikeyan, IIITDM Kancheepuram, India

Prof. Arturo Mediano, University of Zaragoza, Spain

Prof. Dharmendra Singh, IIT Roorkee, India

Prof. Asheesh K. Singh, MNNIT Allahabad, India

Prof. Manoj Kumar Meshram, IIT BHU, India

Prof. N.K. Shukla, University of Allahabad, India

Dr. Maurizio Bozzi, University of Pavia, Italy

Dr. Anthony Ghiotto, University of Bordeaux, France

Dr. Rajeev Jyoti, ISRO, India

Mr. Mirza Mohammad Zaheer, ISRO, India

Dr. Chinmoy Saha, IIST, Thiruvananthapuram, India

Dr. Ashutosh Kedar, LRDE, DRDO, India

Dr. V.S. Gangwar, LRDE, DRDO, India

Dr. George Shaker, University of Waterloo, Canada

Dr. Dilip Kumar Kothari, Nirma University, Ahmedabad, India

Dr. Yatendra Kumar Singh, IIT Patna, India

Dr. Chow Yen Desmond Sim, Feng Chia University, Taichung, Taiwan

Mr. Spandan Manna, RWTH Aachen University, Germany

Mr. Sanjeevikumar Padmanaban, Canada

Mr. Shobit Agarwal, Università di Bologna, Italy

Finance Chair:

Dr. Anand Sharma, MNNIT Allahabad, India

Dr. Gaurav Upadhyay, IT Gopeshwar, India

Technical Program Committee:

Prof. Zhi Ning Chen, ARTIC, NUS Singapore

Prof. Mohammad S. Sharawi, Polytechnique Montréal, Canada

Dr. Wen Cheng Lai, National Yunlin University of Science and Technology, Taiwan

Dr. Rabie A. Ramadan, University of Hail, KSA

Dr. Dhananjay Singh, Hankuk University, South Korea

Dr. Mohsen Koohestani, ESEO, Angers, France

Prof. M. Jaleel Akhtar, IIT Kanpur, India

Dr. Karun Rawat, IIT Roorkee, India

Dr. R.K. Chaudhary, IIT Kanpur, India

Dr. Ravi Kumar Gangwar, IIT(ISM) Dhanbad, India

Dr. Prashant Vasistha, Defence Lab, DRDO, India

Dr. Bambam Kumar, NIT Patna, India

Dr. Akhilesh Mohan, IIT Roorkee, India

Dr. Amit Kumar Singh, IIT Patna, India

Dr. Niraj Pratap Singh, NIT Kurukshetra, India

Dr. Ravi Panwar, IIT BHU Varanasi, India

Dr. Tushar Goel, NIT Uttarakhand, India

Dr. M. Venkatesh Kumar, Amrita Vishwa Vidyapeetham, Chennai

Dr. Rajan Mishra, MMMUT Gorakhpur, India

Dr. Nand Kishore, HBTU Kanpur, India

Young Professionals (YP):

Dr. Debdeep Sarkar, IISC Bangalore, India

Dr. Tushar Sharma, Renesas Electronics, San Diego, USA

Dr. Dinesh Yadav, Manipal University, Jaipur, India

Mr. Krish E, Ministry of Electronics & Information Technology, Govt. of India

Dr. Abhishek Sharma, City University of Hong Kong, Hong Kong

Dr. Thummalaru Sreenath Reddy, IIIT Kanchipuram, India

Women In Engineering (WIE):

Dr. Meenakshi Rawat, IIT Roorkee

Dr. Seema Awasthi, IIIT Allahabad

Dr. Shweta Tripathi, MNNIT Allahabad

Dr. Smriti Agarwal, MNNIT Allahabad, India

Dr. Situ Rani Patre, NIT Rourkela

Dr. Richa Agrawal, NIT Patna, India

Special Interest Group on Humanitarian Technology (SIGHT):

Dr. Dharmendra Kumar Jhariya, NIT Delhi, India

Dr. Ankit Yadav, IIT Kanpur, India

Dr. Vikrant Varshney, Synopsys, Bengaluru, India

Dr. Nayneesh Kumar Mishra, IIIT Allahabad, India

Mr. Kumar Mohit, MNNIT Allahabad, India

Dr. Prashant K. Shah, NIT Surat, Gujarat

Local Organising Committee:

Prof. Haranath Kar, MNNIT Allahabad, India

Prof. V.K. Srivastava, MNNIT Allahabad, India

Prof. Vijaya Bhaduria, MNNIT Allahabad, India

Prof. Amit Dhawan, MNNIT Allahabad, India

Dr. V. Krishna Rao Kandavli, MNNIT Allahabad, India

Dr. Arvind Kumar, MNNIT Allahabad, India

Dr. Basant Kumar, MNNIT Allahabad, India

Dr. Sanjeev Rai, MNNIT Allahabad, India

Dr. Manish Tiwari, MNNIT Allahabad, India

Dr. Yogendra Kumar Prajapati, MNNIT Allahabad, India

Dr. S.K. Gupta, MNNIT Allahabad, India

Er. Asim Mukherjee, MNNIT Allahabad, India

Dr. Rajeev Gupta, MNNIT Allahabad, India

Dr. P. Karuppanan, MNNIT Allahabad, India

Dr. Sumit Kumar Jha, MNNIT Allahabad, India

Organising Secretary:

Dr. Vinay Kumar, MNNIT Allahabad, India

Student Activity:

Dr. Deep Tripathi, Université de Sherbrooke, Canada

Mr. Sheikh Dobir Hossain, University of Texas, USA

Dr. Krishan Kumar, NIT Hamirpur, India

Dr. Raghvendra Pal, NIT Surat, India

Dr. Vivek Rajpoot, AEC, Andhra Pradesh, India

Dr. Anurag Upadhyay, REC Ajamgarh

Mr. Saurabh Raj, MNNIT Allahabad, India

Mr. Tilakdhari Singh, MNNIT Allahabad, India

Mr. Pawan Kumar Shukla, MNNIT Allahabad, India

Mr. Aditya Pal, MNNIT Allahabad, India

Mr. Indra Kumar Singh, MNNIT Allahabad, India

Mr. Vishnu Kumar Mishra, MNNIT Allahabad, India

Ms. Diksha Maurya, IIT(ISM) Dhanbad, India

Student Co-ordinator:

Mr. Piyush Kumar Mishra, MNNIT Allahabad, India



1ST IEEE - INTERNATIONAL CONFERENCE ON MICROWAVE, ANTENNA AND COMMUNICATION

(MARCH 24-26, 2023)

Conference Website: <https://www.ieeemac.org>

Organised in Offline/Hybrid mode at: Electronics and Communication Engineering Department

MNNIT Allahabad, Prayagraj, U.P. India

In Technical Collaboration with

Université de Sherbrooke, Canada &

Benedict College, Columbia, USA



PAPER SUBMISSION

Interested students/researchers/academicians/industry persons can submit their original and previously unpublished work, including specific results. All papers are required to be prepared and submitted in the IEEE Standard two-column conference format of A4 size in English. Papers must be four to six pages in length, including texts, figures, photographs and references. The first page must include the title of the paper, author(s), affiliations, address and text. Please do not include page number on submitted documents. Failing to confirm to the standard format will result in rejection. Detailed format information is available at IEEE Website (<https://www.ieee.org/conferences/publishing/templates.html>). The similarity score of the paper should not be more than 15%.

PAPER UPLOAD

All papers must be submitted in PDF via Microsoft CMT:

<https://cmt3.research.microsoft.com/MAC2023>

PUBLICATION

All accepted & presented papers of the Conference by duly registered authors, will be submitted to IEEE Xplore Digital Library for Possible Publication.

MODE OF CONFERENCE

The conference will be conducted in Offline/Hybrid Mode

IMPORTANT DATES

Paper Submission Starts	September 5, 2022
Paper Submission Deadline	November 22, 2022
Acceptance Notification	January 23, 2023
Start of Registration	January 23, 2023

REGISTRATION FEE

	Category	Indian Delegates	Foreign Delegates
Early Paper Submission Advantage (For Papers Submitted Till 31 October 2022)	Student (IEEE)	INR 3900/-	USD 150
	Student (Non-IEEE)	INR 4900/-	USD 250
	Faculty	INR 7900/-	USD 350
	Industry	INR 10900/-	USD 450
Regular	Student (IEEE)	INR 4900/-	USD 190
	Student(Non-IEEE)	INR 5900/-	USD 290
	Faculty	INR 9900/-	USD 390
	Industry	INR 12900/-	USD 490

*** 10% Additional Rebate for Early Bird Registration (Before 31 January 2023, 11 PM - IST) on all types/categories of registrations.**

TECHNICAL SPONSORSHIP

- IEEE UP Section
- IEEE Microwave Techniques and Technology Society (MTT-S)
- IEEE Antennas and Propagation Society (AP-S)
- IEEE Communication Society (COM)
- IEEE Sensor Council
- IEEE Young Professional (YP)
- Women In Engineering (WIE)
- Special Interest Group on Humanitarian Technology (SIGHT)

TRACKS

The Topics of interest include but are not limited to-

Microwave Engineering: Microwave Materials, Circuits, Systems and Applications, Power Amplifier and Circuits, Micro Machined Transformation Lines and Wave Guides, Microwave Device Modelling, Active and Passive Microwave Components, Meta-Materials and Meta Surfaces, Multiband, Broadband Tunable and Reconfigurable Filters, Frequency Selective Surfaces, Filters and Multiplexers, Wireless Power Transfer, Microwave Sensors, Microwave Imaging, High Power Microwave and Microwave Tubes, RF Energy Harvesting and Applications, Slotted and Leaky Wave guides.

Antenna Design: Millimeter Wave, THz Technologies and Systems, Antenna Measurements, Interactions and Coupling, Active, Adaptive and Reconfigurable Antennas, Antennas Array Analysis and Synthesis, Broadband and Multi Band Antenna, HF,VF Antennas and Optical Nano Antenna, Integrated Antenna, Smart Antenna and Digital Beam Forming, Dielectric Resonator Antenna, Antenna Design for Biomedical Applications (Implantable, Wearable etc.), RFID Antenna/Sensors and Systems, Conformal Antenna/Filtenna, MIMO Antenna, RF sensors, Multiband and Wideband Antenna, Antenna for Cubesat, Satellite and Ground Station Applications, Underwater Antenna Design, Phase Array and Beam forming Antenna.

Communication Systems: Space Applications/Satellite Communication, UWB Communication System, Wireless Sensor Networks and Applications, 5G and 6G Wireless Technology, Communication Theory, Communication Networks and Signal Processing, Wireless and Optical Communications, Quantum Communication and Computing, Sensor Networks and Body Area Networks, RADAR Communication, Data Communication Network, Cognitive Radio.

Emerging Technologies and Systems: Machine Learning and AI Technologies, VLSI for communication, GaN HEMT devices, Medical Image Processing, Magnetic Induction (MI) based Communications, MIMO Techniques, Underwater Wireless Communication, Underwater Sensors & Modern Sensor System, IOT Technologies, Energy Harvesting, Green Communication, Molecular Communication.

INDUSTRY PARTNERS

- Bhumi Entech Equipments

CONTACT INFORMATION

EMAIL: ieeemac2023@mnnit.ac.in

PHONE: +91 7376158595, +918887726558

ADDRESS: Organizing Secretary, MAC2023

ECED, MNNIT Allahabad, Prayagraj-211004, UP, India

WEBSITE: <https://www.ieeemac.org>