



IEEE ELEXCOM 2023



IEEE International Conference on Electrical, Electronics, Communication and Computers August 26 - 27, 2023, IIT Roorkee, Uttarakhand, India

Website: www.iitr.ac.in/elexcom, Email: elexcom@iitr.ac.in



CALL FOR PAPERS

ELEXCOM'23 invites individuals to connect, engage, and influence the development of autonomous vehicles globally. ELEXCOM'23 highlights include contributed research papers, invited talks, vendor exhibitions, practical experience reports, tutorials, presentations, and panel discussions. The papers are invited in the field of Unmanned Autonomous Vehicles/Drones, Electric Vehicles, Radars, Wireless Communication, Signal Processing, Robust Control, Networks, $Artificial\ Intelligence/Machine\ Learning, intelligent\ computing,\ and\ their\ applications.$

The highlights of ELEXCOM'23 include original research papers, invited talks, vendor exhibitions, tutorials, presentations and panel discussions. It aims to provide a stimulating forum for representatives from industry, academia and government agencies to share ideas, report findings and discuss products, thus defining future directions in these cutting-edge technologies. With various stakeholders onboard, ELEXCOM'23 is expected to produce a comprehensive knowledge of what the industry, society, national and international diaspora need.

IMPORTANT DATES		
Submission of papers	June 10, 2023	
Notification of acceptance	June 30, 2023	
Camera ready paper	July 25, 2023	
Early-Bird Registration	August 5, 2023	
Conference Date	August 26-27, 2023	

Paper submission link: https://tinyurl.com/2sacewhs

Submission Guideline: Kindly ensure that the paper is formatted as per IEEE template (not exceeding 6 pages).

Organizing Committee

Prof. Kamal Kishore Pant, Director, IITR, India

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Website Chairs: Prof. Pradumn Kumar Pandey, IITR

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*** The papers are invited in ALL the areas of Electrical, Electronics, Communication and Computers, specifically, but not limited to-

Communication Beyond 5G/6G

- Network architectures and communication protocols
- Massive MIMO/Millimeter wave communications
- 3D aerial BS placement and online/offline UAV trajectory optimization
- Theoretical frameworks for the analysis of wireless communications
- System-level simulation studies of wireless communications
- Satellite & Space Communications
- Smart Grid Communications
- Quantum Communications & Computing
- Next generation technologies, such as, Reconfigurable Intelligent Surfaces, Cell-free system
- Communication QoS, Reliability, & Modeling
- Green Communication Systems & Networks
- Optical Networks & Systems
- Signal Processing for Communications
- THz Communication
- AI/ML for communications
- V2V and V2X communication
- Image processing
- Autonomous underwater and aerial vehicle communication and applications
- Signal processing and communication allied areas

Intelligent Computing and Automation

- Artificial Intelligence (AI) in advanced networking
- Big Data Cloud/Fog/Edge Computing, IoT, Industry 4.0 and beyond
- AI/Machine Learning (ML) in computer vision applications
- Safety, security, cyberattacks and hijacking-
- AI/ML in Autonomous Vehicles (AVs)
- Effect of AVs on public health
- High performance computing
- **Evolutionary Computing**
- Intelligent algorithms for automation
- Connected autonomous vehicles and internet of
- Reinforcement Learning (RL) and Deep Reinforcement Learning (DRL)
- Intelligent and Autonomous vehicles
- Intelligent Transportation System
- AV/UAV in Agriculture, Transportation and Smart city applications
- Software defined networking and wireless sensors network
- Green Computing and communications

UAV Based Applications

- Drone Based Applications in Agriculture, Surveillance, project monitoring etc.
- Anti-drone
- AI/ML applications
- Sensor technology (Lidar, Radar, Camera, etc.)
- **Electronics & Instrumentation**
- Radar Absorbing Structures
- Stealth Radomes
- Microwaves for Target Detection & Identification
- Electromagnetic Interference Shielding
- Microwave Measurements
- Microwave Absorbing Materials
- Stealth Materials
- Chaff Materials
- EM Wave Radiation Effect
- Mobile Radiation Effect
- **EM Shielding**
- EMC & EMI
- Over the air RCS measurements
- Information & Communication Technology
- Drone and allied areas

Electric and Autonomous Vehicles

- Charging Software & AI/ML Support Charging Infrastructure
- **Energy Storage Technologies**
- Power train and drives for electric transportation
- EV/AVs Industry Regulations, Economics and Standards
- Renewable Integration
- Cyber resiliency in EV/AVs
- Sustainable Development and Transformation in
- Grid Integration and allied areas
- Battery Management and Swapping Systems
- Intelligently controlled EV/AVs
- Power Systems operation, control and allied
- Power Electronics applications and allied areas
- System Modelling and Control applications

REGISTRATION FEES			
Category		IEEE Member	Non-IEEE Member
Student (UG/PG/Research)	Indian	3000 INR	3500 INR
	Foreign	200 USD	250 USD
Academician/ Industry	Indian	8000 INR	9000 INR
	Foreign	300 USD	350 USD