

## 3<sup>rd</sup> International Conference on Range Technology Integrated Test Range, DRDO, Chandipur, India







**15 – 17 February, 2023** 

**IEEE Communications and Computer Joint** Societies Chapter, CH10943

# **Call For Papers**

#### **About Conference**

Integrated Test Range, Chandipur, the premier test range of the country with state-of-the-art systems and facilities is all poised to organize the 3rd International Conference on Range Technology ICORT-2023 in Hybrid mode.

The conference is aimed at bringing the range experts and technologists to a common platform to foster ideas and knowledge in all facets of technologies in the test ranges worldwide. Prospective authors intending to participate in the conference are requested to submit original research papers related to range technologies, such as, but not limited to:

#### Antenna, RF & Radar Systems

- Advances in Antenna Technologies & Systems
- Wave Propagation through atmosphere, Plume, Plasma and other Anisotropic media & its effects on performance parameters of Rx-systems
- Phased Array Techniques: Analog and Digital beam
- Radar Transmitters SSPA, HPA, High Power Oscillators, Modulators, TR modules & other High Power Microwave Devices.
- Conformal antenna, transmission line & MMIC
- Advances in Radar Receivers & Signal Processing
- Radar Cross Section (RCS), RCS Enhancement, Stealth **Techniques & Radar Beacons**
- Bi-static, Multi Static Radar, Cognitive Radar, Over The Horizon, MIMO, mm wave Radar, ROACH & Met Radar
- ECM & ECCM
- Radar for Range Applications : Tracking & Surveillance
- Advances in microwave signal measurements & measuring instruments

#### **IR Tracking & Image Processing**

- Image and Video Analysis and Processing for Range Applications Viz Sensing, Enhancement, Modelling, **Registration and Fusion**
- Recent Trends of Electro-Optics for Defence Applications: New Generation Sensors, Long Range **Optics, Processing Hardware**
- Deep Learning for Image and Video Processing
- Object Detection, Recognition, Classification and **Tracking**
- IR, Hyper Spectral and Multi-spectral Imaging
- Computational Imaging
- Image synthesis, Rendering & visualization

# Telemetry, Communication & Flight Termination

- Aeronautical Telemetry Systems Ground Segment and **Flight Segments**
- PN Ranging, TDoA, Satellite Navigation
- Modulation, Spectrum Management, Codina. **Equalization, Quantum Error Correction**
- Secured Communication, Data Security, Quantum
- Active & Passive Repeaters for Communication & **Telemetry using Aerial & Space Platforms**
- Flight Termination Systems
- SDR, RF SoC Architectures & Applications
- Broadband, Mobile and Satellite Communication
- Green Communication, Wireless Networks, Optical **Networks**
- Software Defined Networking and IoT
- Audio / Video processing and Communication

#### **Data Analytics, Decision Theory & Control Systems**

- Recent Trends in Parameter and Dynamic Estimation, Multi-Source Data Fusion, Data Association, Data Classification
- Bayesian and MHT based Decision Making etc.
- AI, Machine/Deep Learning for Defence Applications
- Cloud Computing, Big Data Analytics for Range **Application**
- Modeling and Simulation of Range Instruments
- Industrial Servo Control, Drives, Predictive Control, **Optimal Control & Intelligent Control Systems**

#### **Range Systems & Mission Management**

- Range Safety
- UAV, Drones & Unmanned Targets for Range **Applications**
- Quality & Reliability
- Synchronization of Sensors using GNSS, NaVIC Constellation

#### **Organising Committee**

Chair: Shri H K Ratha, Director, ITR

Co-chair: Shri Manish Kumar Shrivastava

**Technical Chair: Dr Pradipta Roy** 

**Convener: Shri Pankaj Gupta** 

**Technical Co-Chair: Shri Sandipan Sarkar** 

Co-Convener: Shri Prodyut Kumar Roy

**Treasurer: Shri S K Pattnaik** 

**Contact Details** 

Convener: +91 8763049545 convener-icort.itr@gov.in

Technical queries: +91 6782 272269

technical-icort.itr@gov.in

#### **Important Dates**

**Paper Submission** 30 SEP 2022

**Paper Acceptance** 

(a) Notification 31 OCT 2022

Paper Due 31 DEC 2022

**Conference Dates** 15-17 FEB 2023

#### **Submission Guidelines**

- All manuscripts be double-blind reviewed for technical content and scope
- All submissions should be in English with maximum size of 6 A4 pages
- Registration & Camera Ready Papers should be in PDF, two **columns IEEE format**

**Submission Link** https://icort2023.edas.info Visit for more info https://icort.in







3<sup>rd</sup> IEEE International Conference on Range Technology (ICORT-2023)
15-17 February 2023

#### About the Conference

Integrated Test Range, Chandipur, the premier Test Range of the country with state-of-the-art systems and facilities is going to organise the 3<sup>rd</sup> IEEE International Conference on Range Technology (ICORT-2023). The conference will be held on hybrid platform.

Previous two editions of ICORT were aimed at aggregating Test Range experts and technologists to a common platform in order to foster ideas and knowledge in all facets of technologies required in a Test Range. ICORT-2023 carries forward the idea in order to explore the futuristic challenges for a Test Range posed due to technological advancement in weapon systems, complex test scenarios etc. and working towards solutions to mitigate those.

Prospective authors intending to participate in the conference are requested to submit original research articles on topics (given below but not limited to) related to Test Range technologies. Standard IEEE conference paper format to be followed and the length of the final paper should be no more than 6 pages in A4 size.

#### Theme & Technical Tracks

#### Theme: Test & Evaluation of Weapon Systems: The Global Perspective

- Antenna, RF, Microwave & Radar
- Telemetry, Communication & Flight Termination System
- IR Tracking & Image Processing
- Data Analytics, Decision Theory & Control Systems
- Range Systems & Mission Management

## **Important Dates**

Paper Submission : 30 September 2022
Notification to authors : 31 October 2022
Final camera-ready paper : 31 December 2022

### **Registration Fee**

Category	Indian IEEE	Indian non-IEEE	Overseas IEEE	Overseas Non- IEEE
Industry	₹ 10,000	₹ 12,000	\$ 150	\$ 175
Academics	₹ 8,000	₹ 10,000	\$ 125	\$ 150
Students	₹ 2,500	₹3,000	\$ 35	\$ 45

#### **Organising Team**

Shri H K Ratha, Director, ITR : Conference Chair Shri Manish Kumar Shrivastava : Conference Co-chair Dr Pradipta Roy : Technical Chair

Shri Pankaj Gupta : Convener

Shri Sandipan Sarkar : Technical Co-chair

Shri Prodyut Kumar Roy : Co-convener Shri S K Pattnaik : Treasurer

Organiser: Integrated Test Range, Chandipur, DRDO

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