

Topics of Interest

International Conference On Range Technology (ICORT) 2019

Prospective authors intending to participate in the conference are requested to submit original research paper related to range technologies, such as, but not limited to:

Test and evaluation in a Test Range

- Advanced systems and technologies for range applications
- Instrument calibration and error analysis
- Bias modelling and analysis
- Quality standard and quality assurance in flight critical systems
- Non-conventional and green power
- Timing standards and synchronization in range

Image processing, computer vision and electro-optics

- Image processing, computer vision and computer graphics
- Infrared Imaging system
- High speed imaging
- Long range optics and telescopic tracking
- Automatic target detection and tracking
- Multi-spectral imaging and fusion

Emerging technologies in Radar

- Antenna technology
- Beam forming in phased array radar
- Doppler weather radar and Nowcasting
- Microwave tubes, solid state devices and circuits
- Radar signal processing
- RCS estimation, measurement and stealth technology
- MEMs based sensor and RFID
- EMI/EMC
- ECM and ECCM

Telemetry, communication and network

- Flight instrumentation and avionics - sensors, amplifiers, antenna
- Tracking schemes and feeding mechanisms in multi-band & multi-target scenarios
- Modulation, coding and encryption
- Communication through plasma, plume
- Optical network
- Smart sensor network, cognitive network and IoT
- Channel estimation, equalization and multi-path mitigation

- Radio over fibre, Software Defined Radio
- Spread spectrum and MIMO techniques
- Satellites for communication and telemetry

Aerospace, aerodynamics and control systems

- UAV flight planning, piloting and flight management
- UAV autopilot design, trajectory following and control
- Aerial robotics
- Aerodynamics, propulsion and control for supersonic UAVs
- Estimation, measurement and management of UAV signature for aerial target application
- Advanced control system for range applications

Armament and propulsion

- Explosives, propellants and pyrotechnics
- Static, dynamic, non-destructive tests of armaments store
- Advanced techniques in propulsion
- Aerodynamics and structures
- Aerospace launch mechanism

Real time systems and data analytics for range applications

- Modern trends and optimization techniques in embedded system
- Artificial intelligence, machine and deep learning
- Big data analysis and cloud computing
- Estimation and target tracking
- Data association, target classification and data fusion
- Modelling and simulation
- Mission critical and fault tolerant systems

Range safety and flight termination system

- Hazard identification, reliability and risk analysis
- Blast and shock mitigation
- Debris analysis
- Automatic flight termination system
- Automatic decision making system