



10 YEARS ITB

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Higher Education in Engineering  
in Indonesia

*innovation for sustainable growth*

# ICST 2017

INSTITUT TEKNOLOGI BANDUNG

**BANDUNG, INDONESIA**  
**NOVEMBER 3-4, 2017**

The 1st International Conference on Satellite Technology, Bandung.  
Institut Teknologi Bandung, Indonesia.

**Venue:**  
Institut Teknologi Bandung, Indonesia

We invite you to submit original technical papers in the following topics, but not limited to:

#### 1. Satellites and Nano-Satellites/CubeSats

Satellite communications (hybrid satellites and terrestrial networks); Special protocols for nano-satellites; Onboard processing technology; Interplanetary communications (spatial mission analysis, inflight experiences, delay tolerant networking [DTN]); Nano satellites and nano-rockets; Fundamental of nano-satellites communications; New technologies specific for small satellites; Applications (earth observation, science, telecommunications, navigation); New technologies; Satellite constellation design;

#### 2. Satellite and Space Communications

Earth-space communications MIMO satellite communications; Hybrid satellite and terrestrial networks; Access Schemes; Demand Assignment Multiple Access (DAMA); Cross layer air interface design; Channel models; Navigation services; Reliable multicast protocols; Transport protocol performance over satellite; IP over satellite Routing protocols; Game theory applications in satellite networks; Onboard switching and processing technologies; QoS and performance; Call admission control schemes; Dynamic bandwidth allocation; Adjacent and terrestrial interference; Fade mitigation techniques; Advanced channel modelling; Security, privacy, and trust; Radio resource management; IT application in Space Communications; Standards activities; Signal processing in telecommunications;

#### 3. Delay Tolerant Networking (DTN)

Use of DTN protocols in space missions; Satellite

based remote eHealth; Satellite based alarm systems; Satellite based sensing and data mining; Satellite based weather forecast Satellite based earthquake surveillance; Satellite based environmental surveillance Radar Systems;

#### 5. Antennas, Radio & Networks

Antenna system; Smart antenna; Radiowave propagation; Wireless system; Wireless networks; Access schemes; Beamforming & MIMO;

#### 6. Warfare

Electronic warfare target location systems; Statistical multisensor-multitarget information fusion; Multisensor data fusion; Multimodel surveillance; Military applications;

#### 7. Galaxy-scale-satellite Communications and Exploration Missions

Planetary exploration management; Space astronomy advances; Solar-terrestrial sciences; Space life sciences and mission monitoring; Space physical sciences and satellite communications; Operational space medicine; Human exploitation of space resources;

#### 8. Control Technology

Applications of control technology for Satellite, Aerospace, Communications, Networks and Military;

#### 9. Remote Spatial Sensing

Remote sensing technology and geographic information system (GIS); Remote sensing computation applications; Optical communication for remote sensing; High performance computing for

remote sensing; Lidar technology in remote sensing; Satellites and remote sensing; Geolocation of radio frequency signals; Synthetic aperture radar (SAR) image process modelling; Quality of remote data (spatial, spectral, radiometric and temporal resolutions); Remote sensing tools and software; Sensor calibration; Applications of remote sensing; Remote sensing for solar energy forecasting; Turbulence modelling and simulation; Climate prediction models;

#### 10. Astronomy, Astrophysics, Atmospheric and Magnetospheric Sciences

Applications of Astronomy, Astrophysics, Atmospheric and Magnetospheric Sciences on satellite and interplanetary missions

#### 11. Avionics Systems

Avionics Systems; Unmanned Systems; Air Traffic Management;

#### 12. Internet of Things (IoT)

Applications of satellite technology on IoT; Smart Cities (Smart Parking, Smartphone Detection, Traffic Congestion, Smart Lighting, etc); Smart Water (Potable water monitoring, Chemical leakage detection in rivers, River Floods, Water Leakages, etc); Security & Emergencies; Retail (Supply Chain Control, NFC Payment, Intelligent Shopping; Applications, Smart Product Management, etc); Logistics (Quality of Shipment Conditions, Item Location, etc); Industrial Control (M2M Applications, Indoor Air Quality, Temperature; Monitoring, Indoor Location, etc); Smart Agriculture (Green Houses); Digital health/Telehealth/Telemedicine; Smart Farming; Smart Grids;

#### Important Dates:

Paper Submission Deadline: **June 15, 2017**

Acceptance Notification: **August 5, 2017**

Final Paper Submission Deadline: **October 1, 2017**

Registration Deadline (Included in Conference

Proceedings): **October 15, 2017**

#### Committee

General Chair:

Dr. Emir Mauludi Husni

#### All accepted papers will be included in:

ADVANCED SCIENCE LETTERS

ISSN: 1936-6612 (Print); EISSN: 1936-7317 (Online)  
(SJR Q3) and Conference Proceedings

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