

# SmartCom 2025

2025 International Workshop on Smart Wireless Communications  
June 4-6, 2025, Eindhoven University of Technology, The Netherlands



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## SmartCom 2025 Committees:

### General co-chairs

- Dr. Ulf Johannsen (TU/e)
- Prof. Osamu Takyu (Shinshu Univ.)

### Executive co-chairs

- Dr. Victoria Gómez-Guillamón Buendía (TNO)
- Dr. Kentaro Ishizu (NICT)
- Prof. Mamiko Inamori (Tokai Univ.)

### TPC co-chairs

- Dr. Sander Bronckers (TU/e)
- Prof. Kohei Ohno (Meiji Univ.)

### Keynote session co-chair

- Dr. George Exarchakos (TU/e)
- Prof. Suguru Kameda (Hiroshima Univ.)

### Special session organizers

- Dr. Arjan Droste (TU Delft)
- Dr. Anastasia Lavrenko (UTwente)
- Dr. Yanki Aslan (TU Delft)
- Dr. Salvador Mercader (ESA)
- Prof. Kenta Umebayashi (Tokyo Univ. of Agriculture and Technology)
- Prof. Koji Ishibashi (The Univ. of Electro-Communications)
- Prof. Satoshi Tsukamoto (Tohoku Univ.)
- Dr. Takuto Arai (NTT)

### Poster session co-chairs

- Dr. Teun van den Biggelaar (AntenneX)
- Prof. Hideya So (Shonan Institute of Technology)
- Dr. Doohwan Lee (NTT)

### Finance co-chairs

- Prof. Xiaoyan Wang (Ibaraki Univ.)

### Local co-chairs

- Dr. Luca Zappaterra (TU/e)
- Prof. Mai Ohta (Fukuoka Univ.)
- Prof. Jin Nakazato (The Univ. of Tokyo)

### Patronage & exhibition co-chairs

- Dr. Niels Kramer (AltumRF)
- Dr. Takahide Murakami (KDDI Research)
- Dr. Koji Oshima (NICT)

### Publication & publicity co-chairs

- Dr. Francesca Chiappini (CITC)
- Dr. Kanako Yamaguchi (Mitsubishi Electric Corporation)
- Prof. Katsuya Suto (The Univ. of Electro-Communications)

**Scope:** SmartCom is the international workshop jointly organised by several IEICE Technical Committees and technical key players outside Japan. SmartCom 2025 is hosted in collaboration with Eindhoven University of Technology (TU/e), The Netherlands. SmartCom 2025 covers not only with radio technology, spectrum management, wireless networks, communication theory and flexible hardware, but also with antennas and device technology. The organizing committee expects that the workshop also represents a great opportunity for networking and initiating cooperative research and joint proposals. The topics covered by SmartCom 2025 include, but are not limited to:

#### Topics:

#### Dynamic spectrum access, sharing, and management

- Spectrum sensing and measurement
- MAC and networking protocols for DSA
- Dynamic spectrum access and sharing for IoT, 5G, and Beyond 5G systems
- Energy efficient technologies for DSA
- Standards, regulatory policies
- Green cognitive radio

#### Heterogeneous wireless networks

- Ultra broadband small cell deployment
- C/U splitting, common pilot channel, mobility management
- Dynamic cell structuring, virtual cell, ghost cell, phantom cell
- Backhaul/fronthaul architecture, cloud-RAN, centralized-RAN
- Resource control and management in HetNets
- Traffic offloading in HetNets

#### Wireless distributed network, MAC protocol, and network management

- Cross layer design for wireless networks
- Wireless sensor networks in IoT

- Wireless LAN and mesh networks
- High density wireless networks
- Wireless network virtualization and virtual network management
- Software defined networks (SDN)
- Network controlled D2D communication

#### Wireless communication theory and its application

- Network information theory
- Coding theory
- Physical-layer security
- Compressed sensing

#### Hardware architecture and implementations

- Broadband and multiband antennas
- Multiband and multimode RF/analog circuits
- Reconfigurable baseband circuits
- Transceiver architecture for software defined radio, especially for higher frequency bands
- Implementation of testbeds and prototypes, especially for higher frequency bands
- Wireless equipment for smart radio, 5G, and Beyond 5G

#### Advanced wireless technologies

- AI in wireless communications and networks
- Non-terrestrial and hybrid satellite/terrestrial networks for Beyond 5G
- Aerial communications and networks for Beyond 5G
- Fundamental wireless technologies for Beyond 5G
- Local 5G networks
- Advances in mmWave and terahertz wireless communications
- Wireless network technologies based on wireless power transfer

#### Technical exhibitions

- Implementation, prototype, and wireless equipment for smart radio
- Applications and related works of wireless communications

Special Sessions: The topics are to be announced later

### Important Dates:

Paper submission deadline

Beginning of April 2025 (TBD)

Notification of Acceptance

April 2025 (TBD)

Camera-ready paper submission deadline

April 2025 (TBD)

Participant registration deadline

May 2025 (TBD)

Registration fee payment deadline

May 2025 (TBD)

### Registration of paper submission:

In SmartCom 2025, all regular papers will be presented in poster sessions. Note that papers will not be peer reviewed.

SmartCom 2025 Website: <http://ieice-smartcom.info/>

Contact Information: [sr\\_ac-smartcom2025-jp@mail.ieice.org](mailto:sr_ac-smartcom2025-jp@mail.ieice.org)

SmartCom 2025 is organized by IEICE Technical Committee on Smart Radio (SR), co-sponsored by IEICE Technical Committee on Radio Communication Systems (RCS), and jointly hosted by Eindhoven University of Technology, The Netherlands.