

🌐 China 📅 May 20-22, 2025

CONFERENCE WEBSITE: <https://www.wocc.org/>

| About the Conference

The 34th Wireless and Optical Communications Conference (WOCC 2025)

Time: May 20-22, 2025

Venue: Macao, China

Official Website: <https://www.wocc.org/>

Important Dates

 CONFERENCE DATE
May 20-22, 2025

【About Conference】

The 34th Wireless and Optical Communications Conference is an IEEE international conference. In the past three decades, WOCC has become one of the major conferences for telecommunications and networking professionals both in the U.S. and in the Asia-Pacific region, as well as, other regions of the world, presenting the latest innovations, discussing the emerging techniques, exchanging research ideas, and exploring frontier issues. WOCC 2025 will also feature high-quality plenary speeches, as well as, invited keynotes from prominent research and industry leaders.

【Organizers】

Wireless and Optical Communication Conference (WOCC.org)

Macau University of Science and Technology (MUST)

【Technical Sponsors】

IEEE

IEEE Photonics Society

IEEE Macau Section

IEEE Photonics Society

【Organizing Committee】

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Technology

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【Call for Papers】

The 34th Annual Wireless and Optical Communications Conference (WOCC 2025) will serve as an international forum for experts from academia, industry, and government to exchange their novel ideas and latest results on cutting-edge researches and developments in the areas of wireless networks and communications, optical communications and networks, as well as machine learning and AI for communications. The conference will feature several awards, including the famous Charles Kao Best Paper Award, named after the Nobel laureate who advanced fiber optics in telecommunications

1. Wirelesless Networks and Communications Symposium

Radio access technologies for 5G and 6G

Novel antenna systems, propagation, RF design, mmWave, and (sub-)Terahertz communications

Signal processing (transmission and reception) for sub-6GHz, mmWave, and (sub-)Terahertz communications

Multi-antenna (MIMO, Massive MIMO), multi-user, centralized, and distributed multi-node systems

Reconfigurable intelligent surface

Interference management, alignment, and cancellation

Wireless networks: cross-layer design, security, and services

Green communications and networking

Unmanned aerial vehicle communications, vehicular networks, and telematics

Wireless network modeling and performance analysis

Pervasive and wearable computing and networking

Non-terrestrial networks, e.g., low-Earth orbit (LEO) satellite access networks

Seamless integration of optical, edge, and other emerging technologies

Integration of satellite and terrestrial networks

Standardization activities of emerging wireless technologies

Wireless technologies for IoT, smart cities, smart communities and smart homes

Disaggregated radio access networks (RAN), Open RAN and Cloud RAN

2. Optical Communications and Networks

Symposium

Optical communications for long-haul and metro networks

Optical access networks for fixed and mobile services

Optical interconnections for data center applications

Optical networking for IIoT and industry 4.0 applications

Optical networking for data center and computing applications

Optical wireless communication for space-air-ground integrated network in 6G

Fixed 5G, Fiber to the Room (FTTR), WiFi and optical access integration, and Fixed 6G
Software defined networking (SDN) for optical networks

Fibers and fiber devices

Optoelectronic devices, amplifiers, and lasers

Quantum and nonlinear optics as well as nano-photonics

Radio-over-fiber and microwave photonics

Free space and visible light communications

Optical sensors and networks

3. Machine Learning and Artificial Intelligence

Symposium

AI/Machine learning and intelligent communications

AI/Machine learning in network theory and methodologies

AI/Machine learning based information and signal processing

AI/Machine learning in wireless, mobile and satellite communications

AI/Machine learning in network automation

Big data and deep learning applications in network security

Intelligent resource (e.g., spectrum, power) allocation schemes

Intelligent antennas design and dynamic configuration

Intelligent massive MIMO communication systems

Intelligent positioning and navigation systems

Intelligent cooperative/distributed coding

Intelligent wireless sensor networks

Resource and network optimization using big data and machine learning

Cloud-based big data, IoT, and multimedia computing and communications

【Submission Website and Guidelines】

1. All submission shall follow IEEE Templates,
which are available at

http://www.ieee.org/conferences_events/conferences/publishing/templates.html

2. Please submit your original papers at EDAS

<https://edas.info/N33162>

3. There are three symposias (tracks) of WOCC
2025:

Wireless Networks and Communications

Symposium

Optical Communications and Networks Symposium

Machine Learning and Artificial intelligence

Symposium

Please pick one of them to submit your
manuscripts

4. 4-5 page full papers are welcome. A Best Paper
will be awarded to a full paper in each symposium.

【Important Reminder】

1. At least one author of an accepted paper must
register at the "Regular" or "IEEE Members" rates,
even if the author is a student. A registration of
"Student" category is not valid for covering the
accepted paper.

2. One "Regular" or "IEEE Members" registration
can cover at most 2 accepted paper.

3. All submissions should be written in English with
a maximum paper length of 5 printed pages (10pt
font) including figures and tables (maximum 1
additional page with over length page charge of
USD 150 if accepted). Papers exceeding 6 pages
will not be accepted at EDAS.

4. The submitted manuscripts should be in PDF format. All manuscripts are recommended to follow the IEEE templates.

【Contact us】

Contact email: wocc@youngac.cn

Contact phone: +86-13281280917 / +86-13739469027

 **TOPICS OF INTEREST**

3 topics

Research papers are invited in, but not limited to, the following areas:

Multidisciplinary
& General

Image & Signal
Processing

Communication &
Media