



8th IEEE Workshop on Optical Wireless Communications (OWC'18)

Call for Papers

Deadline extended : 14 July, 2018

The 8th IEEE Workshop on Optical Wireless Communications (**OWC'18**) forms part of IEEE Globecom 2018 in Abu Dhabi, UAE, in December. Please visit <http://yamazato.ilas.nagoya-u.ac.jp/owc/> for detail.

SCOPE AND TOPICS

More recently we have seen growing research activities in Optical Wireless Communications (OWC) as a complementary wireless communications technology to the more established radio frequency-based systems such as cellular, Wi-Fi and Bluetooth in order to overcome the spectrum crunch and provide high data rates in urban environment and crowded locations. The OWC technology offering advantages such as free license, wide bandwidth, inherent security, and no radio-frequency-based interference, which makes it very attractive for the emerging 5G wireless communications. Nevertheless, the widespread deployment of optical wireless systems, namely infrared, ultraviolet, and visible light communications (VLC), will face a number of challenges including the weather effects (mostly outdoor), eye and skin safety regulations, compatibility with existing networks, mobility (mostly in outdoor environment), and device/system performance. This has led to a substantial volume of research activities both at academia and industry at a global level to address the challenges and make OWC system a more reliable and viable wireless option. The 8th workshop on OWC cordially invites researchers to share latest research and innovations in OWC technologies, as well as their applications, including theory and practice in the design of OWC-based systems.

Topics of Interest include (but not limited to):

- Indoor and outdoor optical wireless channel and network modeling
- Visible light, infrared, and ultraviolet communications
- Modulation and coding techniques for OWC
- Signal processing for OWC
- Information theory and capacity of OW channels
- MIMO and OFDM techniques for OWC
- Multiple access, scheduling, and interference coordination
- Resource allocation and energy efficiency in OWC
- Topology control and routing for free space optical (FSO) networks
- Airborne FSO systems (e.g., UAV, aircraft, satellite)
- Atmospheric effects on the performance of FSO links
- Long wavelength FSO communications
- Mobility management and resource allocation for VLC networks
- Multihop OWC
- Hybrid OW/RF communication systems and integration with the 5G
- Optical camera communication
- OW sensor networks
- OWC-based system for positioning
- Vehicular OWC
- Underwater OWC systems
- Quantum communication over optical wireless links
- OWC in medical applications

IMPORTANT DATES

Submission Deadline (extended): 14 July 2018

Acceptance Notification: 15 August 2018

Camera-Ready: 15 September 2018

SUBMISSION

IEEE OWC Workshop accepts only novel, previously unpublished papers in the area of optical wireless communications. Prospective authors are encouraged to submit a 6-page IEEE conference style paper (including all text, figures, and references) through EDAS via <https://edas.info/newPaper.php?c=25068&track=91851>.