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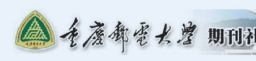
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Special Session 1: Optical Wireless Communication

In recent years, we have witnessed a staggering growth of mobile data traffic because of the widespread use of wirelessly connected mobile devices. Due to the nearly exhausted radio frequency (RF) spectrum resource, it becomes very challenging to support the ever-increasing mobile data traffic through utilizing the conventional RF technologies. As an emerging technology, optical wireless communication (OWC) has lately attracted tremendous attention, due to its many inherent advantages such as abundant license-free spectrum, large capacity, high security and privacy, no electromagnetic interference, etc. OWC can be implemented by using various wavelength regions including infrared (IR), visible light (VL) and ultraviolet (UV), which can also be applied in various scenarios such as indoor, outdoor and underwater environments. Nevertheless, the practical deployment of OWC systems faces many key challenges such as high transmission rate, low energy consumption, low latency, smooth handover, blocking and mobility, and flexible/robust system design.

This special session aims to bring together researchers from both academia and industry to share and discuss the recent progress in all areas of OWC. Potential topics include but are not limited to the following:

- ▶ Novel electrical or photonic devices and components
- ▶ Advanced modulation, coding, equalization and detection
- ▶ Multiple-input multiple-output transmission
- ▶ Multiple access and multi-user scheduling
- ▶ Multi-cell/cellular network design, handover and interference mitigation
- ▶ Channel modelling and characterization
- ▶ Transceiver nonlinearity compensation
- ▶ Resource allocation and management
- ▶ Hybrid and duplex system design
- ▶ Privacy and security enhancement
- ▶ Energy-efficient and cost-effective OWC
- ▶ Artificial intelligence/machine learning-enhanced OWC
- ▶ Visible light communication (VLC) using illumination LEDs
- ▶ Bidirectional LiFi communications
- ▶ Optical camera communications (OCC)
- ▶ VLC-based positioning and navigation
- ▶ VLC-based ranging, detecting and sensing
- ▶ Outdoor free-space optical (FSO) communications
- ▶ OWC for underwater, vehicular and other emerging applications

For more information, please visit: <http://www.iccsn.org/ss1.html>

Organizers

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Publication

Special session accepted full papers after peer review will be included into **ICCSN 2023 Conference Proceedings** and indexed by **Ei Compendex** and **Scopus**, etc. after conference. ICCSN Conference has very credible publication index records.

ICCSN 2022 - ISBN: 978-1-6654-5328-8 | IEEE Xplore Online | Ei-Compendex & Scopus Index

ICCSN 2021 - ISBN: 978-1-7281-9814-9 | IEEE Xplore Online | Ei-Compendex & Scopus Index

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Important Dates

Full Paper Submission Deadline June 10, 2023

Notification of Review Result June 20, 2023

Camera-Ready / Registration Deadline June 25, 2023

Submission Method

▶ Full Paper Submission:

<http://www.easychair.org/conferences/?conf=iccsn2023>

Please Select Track: Special Session 1: Optical Wireless Communication to Submit

▶ Abstract Submission: iccsn_conference@163.com

General Conference Schedule

Day 1, July 21 10:00-17:00 Sign in and Collect Conference Materials

Day 2, July 22 09:00-12:00 Opening Ceremony and Keynote Speeches

13:30-18:30 Parallel Sessions

19:00-20:30 Conference Banquet

Day 3, July 23 09:00-12:00 Parallel Sessions

13:30-15:30 Parallel Sessions

Contact

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