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2022

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8th Biennial Colloquium & 6th International Workshop on Optical Wireless Communications

Co-located with 13th IEEE/IET International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING (CSNDSP'22)

20- 22 July 2022, Porto, PORTUGAL



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The 8th colloquium on optical wireless communications (OWC), one of the largest event, provides a forum for researchers, product and system engineers and systems developers to present and discuss their latest research results in OWC. Papers are solicited on, but are not limited to, the following topics:

- **Indoor OWC**
 - Visible light and infrared communications
 - Hybris VLC/IR
 - Optical camera communications
- **Outdoor and Space OWC**
 - Characterization and modeling of FSO links
 - Advances in communication system design
 - Atmospheric effects on high-data-rate FSO links
 - Diversity schemes in FSO links
 - Deep space and inter-satellite, optical LEO-downlinks
 - Design of flight- and space-worthy OWC
 - Energy efficiency
 - Hybrid RF/FSO systems
 - Radio over fiber and FSO systems
 - Multi-input-multi-output techniques
- **Underwater OWC**
 - Channel modelling
 - Water to UAV communications

• Experiments, sub-system designs and components in OWC

- Optical components
- Novel optical transceivers and architectures
- Novel techniques for rapid target acquisition, beam pointing and tracking
- Infield or laboratory experimental demonstration, test, and performance characterizations for FSO links

• Applications of OWC

- OWC in 5/6G networks
- Massive IoT
- Vehicular communications
- Deep and machine learning
- Integration of optical links in networking contexts (e.g. inter-UAV communications)
- Optical wireless sensor networks

• Others

- Quantum Communications in OWC