



# 1<sup>st</sup> Colloquium on Optical Fiber Devices and Sensing applications

Co-located with 12<sup>th</sup> IEEE/IET *International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING (CSNDSP'20)*

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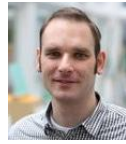
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This colloquium focuses on recent advances and developments in novel concepts, structures, theories, materials and applications for optical fiber devices and sensing applications. The main objective of this colloquium is to provide a platform for international experts to discuss the new technologies and potential applications of optical fiber sensors, nonlinear fiber optics, fiber lasers, special fibers, and fiber technologies and applications in urban construction, environmental monitoring and power system. On the other hand, we also pay attention to the latest developments of optical fiber sensors in biochemical detection and the important applications of nonlinear fiber optics in ultrafast photonics, microscopic spectroscopy, etc. Finally, we will discuss and communication the various new optical fiber sensors based on surface plasmon resonance effect.

According to the above, the topics of primary interest include but not limited:

- Physical, mechanical, acoustic and electro-magnetic sensors
- Chemical, gas, biological, environmental and medical sensor
- Micro structure and nanophotonic sensors
- Gyroscopic, interferometric and polarimetric sensors
- Multiplexing and distributed sensing
- Sensors for smart composite materials
- Sensor interrogation techniques and sensor systems
- Multiple-input multiple-output OFDM Systems
- Surface plasmon resonance sensors
- Sensor networks and field tests
- Novel concepts for fiber sensors
- Nonlinear wave mixing and applications
- Soliton dynamics in optical fibers
- Second-harmonics generation in optical fibers
- Nonlinear optical fiber sources
- Mode-locked, high power and ultrafast fiber lasers
- Novel Optical Fibers and Fiber-based Devices
- Novel fiber laser sources
- Infrared fibers and their applications
- Special fibers and their related optoelectronic devices
- Novel fiber structures
- Fiber technologies and applications

## Submission Dates (According to the general schedule of the CSNDSP 2020)

- Full paper due: 16/02/2020
- Notification of acceptance: 31/03/2020
- Camera ready paper: 31/05/2020

Paper format and submission procedure are available at <https://csndsp2020.av.it.pt>

For further information about this colloquium, please contact: **Dr Qiang Wu and Prof Jinhui Yuan**  
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