



**Call for Papers
Optical Networks and Systems Symposium**

SYMPOSIUM CO-CHAIRS:

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SCOPE AND MOTIVATION:

Global demand for bandwidth continues to increase every year. A major factor contributing to this development is the ever-growing number of fixed and mobile broadband users. In addition, we are beginning to see everyday objects and machines becoming connected. Moreover, coupled with rapidly increasing use of BigData and Cloud-based services, this is resulting in progressively vast volumes (zettabytes and upwards) of data being transported across networks. These trends not only contribute to the growth in data volumes, but also pose entirely new challenges related to data granularity, end-to-end connectivity and reach as well as increasing heterogeneity (in terms of scale, capability, mobility and access mechanisms) in networked connected devices and services. This is impacting network technologies on all network segments from the edge (access) up to the core (backbone), demanding substantial advances in optical communications.

Optical communications then, must evolve to support the challenges identified in the different network segments while making benefit from current efforts such as Software Defined Networking, Network Infrastructure and Function Virtualization, Data Analytics and Machine Learning, Edge computing, emerging network security and emerging optical transport technologies.

IEEE Globecom 2019 Optical Network and System Symposium solicits original papers related to the latest research, development, and applications in these and other relevant areas of optical communication systems and networks.

Key Dates:

Paper Submission: 15 April 2019,

Acceptance Notification: 15 July 2019,

Camera-Ready: 16 Aug 2019,

Submission Link

<https://edas.info/N25085>

MAIN TOPICS OF INTEREST:

The Optical Networks and Systems Symposium intends to showcase the latest developments in all research areas related to optical networks and systems. The Symposium cordially invites original contributions in, but not limited to, the following:

- Role of optical network in 5G
- Role of optical networks in network function virtualization
- Virtualization and slicing in optical networks
- Machine learning assisted optical networks
- Big data driven optical networking
- Data analytics for optical networks



IEEE Global Communications Conference

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Revolutionizing Communications

CALL FOR PAPERS AND PROPOSALS

- Software defined optical networks
- Optical network control and management
- Multi-band optical spectrum utilization and optimization
- Routing and spectrum assignment for optical networks
- Elastic, flexible rate and flexi-grid optical networks
- Optical network architectures, design, and performance evaluation
- Cross-layer design of optical networks
- Energy efficient optical networks
- Optical network survivability and availability
- Optical network for inter and intra data centre connectivity
- Optical interconnects for high performance computing
- Quantum secure optical networking
- Optical network security
- Optical network testbeds and experiments
- Optical channel characterization
- Impairment mitigation techniques
- Coding, modulation, and signal processing for optical systems
- OFDM and MIMO for optical systems
- Optical access networks
- Optical and wireless network convergence and backhaul network
- Radio-over-fiber
- Free space optical communications and networking
- Visible light communications and networks
- Ultraviolet communications and networks
- Underwater optical communications
- Optical vehicular networks