

Call for Papers for *Optical Networks and Systems Symposium*

Scope and Motivation:

Broadband optical networks and mobile wireless networks have evolved rapidly along their individual paths, and played critical roles in respective application domains. But they will serve jointly for future ubiquitous broadband access. Long-range backhaul passive optical network access and short-range mobile connectivity together will seamlessly connect various terminals and deliver achievable big data services. New technologies are required to better explore network resources and significantly increase the capacity and flexibility of these networks. Emerging optical wireless technologies bridge optical and wireless domains to overcome last-meter and last-mile access bottlenecks. Transmission, security, throughput, and spectral and energy efficiencies of fiber and optical wireless networks as well as their coherent integration with wireless networks remain paramount concerns. IEEE Globecom 2016 Optical Network and System Symposium solicits original papers related to the latest research, development, and applications in these and other relevant areas of optical fiber and optical wireless communication systems and networks.

Main Topics of Interest:

To ensure complete coverage of the advances in Optical Networks and Systems for current and future systems, the Symposium cordially invites original contributions in, but not limited to, the following topical areas:

- Elastic optical networks
- Virtualization in optical networks
- Routing and spectrum assignment for optical networks
- Optical translucent networks
- Software defined networks
- Content delivery networks
- Cross-layer design of optical networks
- Energy efficient optical networks
- Optical network architectures, design, and performance evaluation
- Optical data center networking
- Optical interconnects for high performance computing
- Optical network control and management
- Multi-layer and multi-domain survivability
- Optical network security



- Optical network testbeds and experiments
- Flexible rate and flexi-grid transmission
- Optical channel characterization
- Coding, modulation, and signal processing for optical systems
- OFDM and MIMO for optical systems
- Impairment mitigation techniques
- Capacity of optical systems
- Free space optical communications and networking
- Lighting constrained visible light communications and networks
- Multi-band optical spectrum utilization and optimization
- Visible light positioning and navigation
- Underwater optical communications
- Ultraviolet communications and networks
- Optical vehicular networks
- Optical wireless access networks
- Radio-over-fiber
- Fiber access networks and wireless backhaul
- Inter- and intra- data center networks

Sponsoring Technical Committees:

- Optical Networking
- Transmission, Access and Optical Systems

How to Submit a Paper:

The IEEE Globecom 2016 website provides full instructions on how to submit papers. You will select the desired symposium when submitting. **The paper submission deadline is April 1, 2016. Unlike recent ICC's and Globecom's, this is a hard deadline that will not be extended.**

Symposium Co-Chairs:

- Suresh Subramaniam (George Washington University, USA) suresh@gwu.edu
- Zhengyuan (Daniel) Xu (USTC, China) xuzy@ustc.edu.cn

Biographies:



Suresh Subramaniam (S'95-M'97-SM'07-F'15) received the Ph.D. degree in electrical engineering from the University of Washington, Seattle, in 1997. He is a Professor in the Department of Electrical and Computer Engineering at George Washington University, Washington, DC. His research interests are in the architectural, algorithmic, and performance aspects of communication networks, with current emphasis on optical networks, cloud computing, and data center networks. He has published over 150 peer-reviewed papers in these areas.

Dr. Subramaniam is a co-editor of three books on optical networking. He has served on the program committees of several conferences including Infocom, ICC, Globecom, and OFC, and as TPC Co-Chair for LANMAN 2014, INFOCOM 2013, ANTS 2008, and the optical networks symposia at Globecom 2006, ICC 2007, and Globecom 2016. He was Chair of the IEEE Communication Society's Optical Networking Technical Committee from January 2012 to December 2013. He is or has been on the editorial boards of the IEEE/ACM Transactions on Networking, IEEE/OSA Journal of Optical Communications and Networking, Elsevier Optical Switching and Networking, Springer Photonic Network Communications, and KICS Journal of Communications and Networks. He is a co-recipient of Best Paper Awards at the ICC 2006 Symposium on Optical Systems and Networks, and at the 1997 SPIE Conference on All-Optical Communication Systems.

He is a Fellow of the IEEE.



Zhengyuan Xu received his B.S. and M.S. degrees from Tsinghua University, Beijing, China, in 1989 and 1991, respectively, and Ph.D. degree from Stevens Institute of Technology, New Jersey, USA, in 1999. From 1991 to 1996, he was with Tsinghua Unisplendour Group Corporation, Tsinghua University, as system engineer and department manager. In 1999, he joined University of California, Riverside, first as Assistant Professor and then tenured Associate Professor and Professor. He was Founding Director of the multi-campus Center for Ubiquitous Communication by Light (UC-Light), University of California. In 2010, he was selected by the “Thousand Talents Program” of China, appointed as Professor at Tsinghua University, and then joined University of Science and Technology of China (USTC). He is Founding Director of the Optical Wireless Communication and Network Center, and Founding Director of Wireless-Optical Communications Key Laboratory of Chinese Academy of Sciences, in USTC. He is also a chief scientist of the National Key Basic Research Program (973 Program) of China. His research focuses on wireless communication and networking, optical wireless communications, geolocation, intelligent transportation, and signal processing. He has published over 200 journal and conference papers. He has served as an Associate Editor and Guest Editor for different IEEE and OSA journals. He was a Founding Chair of IEEE Workshop on Optical Wireless Communications.