

# OFS Wins *Journal of Lightwave Technology* Best Paper Award Dr. Paul Westbrook Named OSA Fellow

**OFC 2018, Booth 3339, San Diego, California, March 12, 2018** - OFS, a leading designer, manufacturer and supplier of innovative fiber optic network products will showcase continued technical and industry leadership in a series of events at the annual OFC/ NFOEC conference to be held in San Diego, California from March 11-15, 2018.

In addition to multiple invited and contributed technical papers, OFS authors Dr. Kasyapa Balemarthy, Dr. Roman Shubochkin, Dr. Durgesh Vaidya and Dr. Man Yan have been awarded the *Journal of Lightwave Technology* Best Paper Award for "VCSEL-Based Interconnects for Current and Future Data Centers" by IEEE/OSA. Their paper was one of two winning papers for this year's JLT Best Paper Award, honoring the most influential, highest-cited original paper published in JLT in 2015.

Additionally, Dr. Paul Westbrook of OFS Labs has been named an OSA Fellow for his outstanding innovation, technical and program leadership in photonic devices, particularly development and application of fiber Bragg grating technology for communications and sensing.

The dates and titles of OFS presentations, technical contributions and industry events at this year's OFC are:

## Monday, 12 March 2018 | 13:30 - 16:30, Short Course

# SC208 Optical Fiber Design for Telecommunications and Specialty Applications Instructor: David J. DiGiovanni; *OFS Labs, USA*

Optical fiber development remains a robust field for innovation in both telecom and non-telecom applications. As worldwide bandwidth demand continues to grow, new fiber types and fiberbased components can increase speed, reduce cost and improve the bandwidth of communications networks. In addition, application-specific fiber can enable or benefit a wide array of functions such as simply transporting light between two points, amplifying light, processing signals, sensing environmental characteristics and even transporting particles. The tools available in adapting fiber to particular uses, whether for high-speed communications or other applications, include a range of materials and dopants (glasses, polymers), the mechanics of the fiber (size, coatings, microstructure), waveguiding properties (index profile) and creation of various fiber-based devices such as gratings and amplifiers. These tools have been used to establish an industry that continues to expand as photonics penetrates more and more applications.

This short course will discuss the basics of optical propagation and fiber design, as well as the many ways in which optical fibers can be adapted for a wide range of applications. We will review an array of current fiber technologies and consider the role and capabilities of materials, structures and waveguide design for both fiber and fiber-based photonic components. The focus will be two-fold: coverage of commercial fiber technology and demonstration of the many opportunities available with new and specialty optical fibers. In the former, we will touch on the manufacture, design and properties of optical fiber. Discussion of novel and specialty fiber will include trends for next-generation, high bandwidth communications (designs for advanced modulation formats, space division multiplexing, advanced amplification) as well as the rapidly growing field of non-communications applications in high power fiber lasers, point and distributed optical sensing and hollow-core optical fiber.

### Wednesday, 14 March 2018 | 8:00 - 10AM

### Track D: Devices, Optical Components and Fiber

# Improving distributed sensing with continuous gratings in single and multi-core fibers Speaker: Paul Westbrook, OFS Labs, USA

We review advances in single and multi-core continuous fiber grating array sensor technology. Grating enhanced backscattering offers order of magnitude signal improvements for distributed sensing of shape, temperature and strain over lengths up to 1km.

#### Thursday, 15 March 2018 | 8:00 – 10:00AM, Panel

#### SC208 Optical Fiber Design for Telecommunications and Specialty Applications

Organizer: Alan McCurdy; OFS Fiber Design and Simulation Group, USA In the last year there has been an ever-increasing flurry of announcements of optical network expansions to support applications in the evolving data and telecommunications markets. Standards organizations, governments and businesses are anticipating enormous growth in connectivity over the next five years with the advent of 5G wireless, enhanced cloud services, the Internet of Things, smart cities etc. Analysts have projected a required spend of \$130 -150B in the US alone in the next five to seven years to meet these needs. To support this future demand, plans are being made now for an expansion of fiber-based networks to provide the required high-capacity communication links via small cells, enhanced edge network capability, better data center interconnects, metro backhaul and more. The burden of this expansion has been placed on carriers, ICPs, MSOs and municipalities as well as various private enterprises. In this panel, experts from these organizations will discuss their view of the upcoming transport demand and their plans for near-term network expansions to address these needs. Questions to be addressed include: What applications are driving this expansion? Who are the relevant customers? What are the preferred fiber and cable types? How will the expanded architecture address the current demand and evolve in the future?

#### About OFS

OFS is a world-leading designer, manufacturer and provider of optical fiber, fiber optic cable, connectivity, fiber-to-the-subscriber (FTTx) and specialty fiber optic products. We put our development and manufacturing resources to work creating solutions for applications in such areas as telecommunications, medicine, industrial automation, sensing, aerospace, defense and energy. We provide reliable, cost-effective fiber optic solutions that help our customers meet the needs of consumers and businesses today and into the future.

Headquartered in Norcross (near Atlanta) Georgia, U.S.A., OFS is a global provider with facilities in China, Denmark, Germany, Russia and the United States. OFS is part of Furukawa Electric Company, a multi-billion dollar leader in optical communications.

Please visit <u>www.ofsoptics.com</u>.

###

OFS PR Contact: Sherry Salyer Public Relations shsalyer@ofsoptics.com