

## Alan H. Gnauck Wins 2016 John Tyndall Award

*Award presented annually to an individual who has made outstanding contributions in optical fiber technology*

[The Optical Society](#) (OSA) and the [IEEE Photonics Society](#) announced that Alan H. Gnauck of Bell Labs, Alcatel-Lucent, USA, is the recipient of the 2016 [John Tyndall Award](#), an honor endowed by Corning, Inc. Gnauck is being recognized for “sustained pioneering research contributions that drove commercialization of high-speed, high capacity lightwave communication systems.” The award, one of the top honors in the fiber optics community, was presented to Gnauck during the plenary session of the 2016 [Optical Fiber Conference \(OFC\)](#) Conference.

Gnauck joined Bell Laboratories in 1982 and is currently a member of Technical Staff in the Transmission System Research Group, where his research has focused on optical fiber communications including optical devices and systems. He has performed record-breaking optical transmission experiments at single-channel rates and demonstrated the first terabit transmission in 1996. During his career, he has investigated coherent detection, chromatic-dispersion compensation techniques, parametric optical signal processing and system impacts of fiber nonlinearities. Currently, Gnauck is involved in the study of wavelength-division-multiplexed (WDM) systems with single-channel rates of 100 Gb/s or higher.



Alan Willner (OSA 2016 President), Alan H. Gnauck, Claudio Mazzali (Corning), Kent Choquette (IEEE Photonics Society 2016-2017 President)

“Alan’s work has been instrumental in increasing the capacity of optical communication transmission systems, enhancing the capabilities of transmission systems without companies needing to invest in additional cables,” said Elizabeth Rogan, CEO, The Optical Society. “His outstanding contributions to optical-fiber technology make him an ideal Tyndall Award recipient, and we are honored to recognize his accomplishments and career.”

Gnauck has authored more than 250 journal and conference papers and holds over 29 patents in optical communications. He was elected as a Fellow to The Optical Society in 2004 for his demonstration of new optical transmission technologies. He was named an IEEE Fellow in 2009 and a member of the National Academy of Engineering in 2012. He served as an associate editor for *IEEE Photonics Technology Letters* from 2000 to 2009 and on the Optical Fiber Communications Conference technical subcommittee in 2000, 2001 and 2003 before chairing the subcommittee in 2004. In 2003, he received the [Paul Forman Team Engineering Excellence](#) award for his numerous achievements in the development of high-speed, ultra-high-capacity lightwave systems, including the first demonstration of a Terabit/s system.

"The Tyndall Award was designed specifically to recognize pioneers in fiber optics technology such as Alan Gnauck," said Christopher Jannuzzi, Executive Director, IEEE Photonics Society. "His vital and sustained contributions to high-speed, high-capacity lightwave communications have helped shape the modern world. It is an honor for us to be able to recognize his seminal work."

The John Tyndall Award is named for the 19th century scientist who was the first to demonstrate the phenomenon of internal reflection. First presented in 1987, the Tyndall Award recognizes an individual who has made pioneering, highly significant, or continuing technical or leadership contributions to fiber optics technology. Corning, Inc. endows the award, a prize check and a glass sculpture that represents the concept of total internal reflection. The award is co-sponsored by The Optical Society and the IEEE Photonics Society.

### **About The Optical Society**

Founded in 1916, The Optical Society (OSA) is the leading professional organization for scientists, engineers, students and entrepreneurs who fuel discoveries, shape real-life applications and accelerate achievements in the science of light. Through world-renowned publications, meetings and membership initiatives, OSA provides quality research, inspired interactions and dedicated resources for its extensive global network of optics and photonics experts. OSA is a founding partner of the National Photonics Initiative and the 2015 International Year of Light. For more information, visit [www.osa.org](http://www.osa.org).

### **About IEEE Photonics Society (IPS)**

The IEEE Photonics Society is one of the world's leading technical communities in the field of optoelectronics and photonic materials, devices, and systems, with members and activities engaged in research, development, design, manufacture, and applications, as well as with the various other activities necessary for the useful expansion of the field. As part of this dynamic worldwide community, more than 100,000 photonics professionals actively organize, contribute to, and participate in Society technical conferences, journals and other activities covering all aspects of the field. The IEEE Photonics Society has 75+ worldwide chapters and is part of IEEE, the world's largest technical professional association. The IEEE Photonics Society (IPS) is the current name for the former IEEE Lasers and Electro-Optics Society (LEOS). Learn more at <http://www.photonicsociety.org>.