

## Roel Baets Named 2020 John Tyndall Award Recipient

[The Optical Society](#) (OSA) and the [IEEE Photonics Society](#) have named Roel Baets, full professor at Ghent University in Belgium, the 2020 [John Tyndall Award](#) recipient. Baets is recognized “for seminal research in silicon photonics and for driving the foundry model in this field.”

“Roel Baets’ research has profoundly advanced the modern field of silicon photonics,” said Elizabeth Rogan, CEO of The Optical Society. “It also has far-reaching impact in areas ranging from telecommunication to environmental sensing. Beyond his impressive technical achievements, Baets also is renowned as an extraordinary educator and highly-regarded by his peers in the global optics and photonics community.”

“Professor Baets has been an outstanding contributor to the fiber-optics community, as well as a world-class educator. His research group's groundbreaking work in the area of silicon photonics is just one notable accomplishment that has earned international acclaim, I can think of no one more deserving of this honor.” added Doug Razzano, executive director of the IEEE Photonics Society.



The award, one of the top honors in the fiber optics community, is named for John Tyndall, a 19th century scientist who was the first to demonstrate the phenomenon of total internal reflection. It recognizes an individual who has made pioneering, highly significant, or continuing technical or leadership contributions to fiber optic technology.

The Tyndall Award was presented to Baets at [OFC 2020](#) (Optical Fiber Communication Conference and Exhibition), the world’s leading conference and exhibition for optical communications and networking professionals.

Corning, Incorporated sponsors the award, which consists of a specially commissioned glass sculpture that represents the concept of total internal reflection, a scroll and an honorarium. The award is jointly presented by OSA and the IEEE Photonics Society.

In addition to being a full professor at Ghent University, Baets is associated with the IMEC company, also in Belgium. He received master’s of science degrees from Ghent University and Stanford University, U.S.A., and a doctorate degree from Ghent University. He has been a professor in the Faculty of Engineering and Architecture at Ghent University since 1989, where he founded the Photonics Research Group. He was previously a part-time professor at Delft University of Technology and Eindhoven University of Technology, both in The Netherlands.

He has mainly worked in the field of integrated photonics, making contributions to research on photonic integrated circuits, both in III-V semiconductors and in silicon and silicon nitride, as well as their applications in

telecom, datacom and sensing. In recent years, his research has focused on medical and environmental sensing applications of silicon photonics.

Baets has led major research projects in silicon photonics in Europe. In 2006, he founded ePIXfab, the first global multi-project wafer service for silicon photonics. Since then, ePIXfab has evolved to become the European Silicon Photonics Alliance. He is also director of the multidisciplinary Center for Nano- and Biophotonics (NB Photonics) at Gent University, founded in 2010. He was co-founder of the European master's of science program in Photonics, a joint master's program of Gent University and Vrije Universiteit Brussel.

He is an ERC grantee of the European Research Council and a Methusalem grantee of the Flemish government. He is a Fellow of the IEEE, of the European Optical Society (EOS) and of The Optical Society (OSA). He is also a member of the Royal Flemish Academy of Belgium for Sciences and the Arts. He has been a recipient of the 2011 MOC award and of the 2018 PIC-International Lifetime Achievement Award. Currently, he is a director-at-large on the Board of Directors of The Optical Society (OSA).

### **About The Optical Society**

Founded in 1916, The Optical Society (OSA) is the leading professional organization for scientists, engineers, students and business leaders 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. For more information, visit [osa.org](http://osa.org).

### **About IEEE Photonics Society**

The IEEE Photonics Society forms the hub of a vibrant technical community of more than 100,000 professionals dedicated to transforming breakthroughs in quantum physics into the devices, systems and products to revolutionize our daily lives. We organize, contribute to and participate in technical conferences, journals and other activities covering all aspects of photonics in order to share and disseminate our breakthroughs. And provide our members with professional growth opportunities, publish journals, sponsor conferences and support local chapter and student activities around the world. Learn more at <http://www.photonicsociety.org>.