Professor Evgeny M. Dianov, Russian Academy of Sciences, Awarded 2017 John Tyndall Award

Honor presented annually to an individual who has made outstanding contributions in optical fiber technology and laser science

The Optical Society (OSA) and the IEEE Photonics Society announced that Professor Evgeny M. Dianov, Russian Academy of Sciences (RAS), Russian Federation, is the recipient of the 2017 John Tyndall Award, an honor endowed by Corning, Inc. Dianov is being recognized “for pioneering leadership in optical fiber development and outstanding contributions to nonlinear fiber optics and optical fiber amplifiers.” The award, one of the top honors in the fiber optics community, was presented to Dianov during the plenary session of the 2017 Optical Fiber Conference (OFC) Conference.

Dianov graduated from Moscow State University in 1960 and began his scientific career at the P.N. Lebedev Physics Institute of the USSR Academy of Sciences (1960-1983), then worked in the General Physics Institute (1983-2006). Dianov is currently with the Fiber Optics Research Center of RAS (2006 - present). His research interests include laser physics, nonlinear optics and fiber optics, and he has published more than 700 scientific papers and patents. He received the 1974 State Prize of the Soviet Union for “Neodymium Glass Lasers.” In 1994 Professor Dianov became a Full Member of the Russian Academy of Sciences.

“Professor Dianov and his team began their early research in the field of low loss optical fiber with very notable results – advancing the optical design, transmission, modal characterization, linearity and dispersion of a wide-range of optical fiber compositions,” said Elizabeth Rogan, CEO, The Optical Society. “Several of those advancements were first-to-the-world and possessed record performance attributes. With this award, we congratulate Professor Dianov and his decades-long passion, determination and ground-breaking research in nonlinear fiber optics and optical fiber amplifiers.”

Christopher Jannuzzi, Executive Director, IEEE Photonics Society added, "Professor Dianov’s research brought about a new field of nonlinear fiber optics, enabled by the combination of low loss optical fibers and high power ultrafast lasers. Dianov’s contributions significantly advanced fiber optic technologies and we are honored to recognize his many accomplishments and impressive career.”

Since 1974 Dianov has been involved with most aspects of fiber optics, including fiber fabrication technologies, fiber measurements, nonlinear fiber optics, soliton propagation, fiber lasers and optical...
amplifiers. The main results included new types of optical fibers such as high-strength hermetically metal-coated, dispersion-decreasing, nitrogen-doped and low-loss highly nonlinear fibers; new results in nonlinear fiber optics such as the first observation of soliton self-frequency shift, the discovery of electrostriction mechanism of soliton interaction, generation of a train of fundamental solitons at high repetition rate, the proposal and experimental confirmation of a photovoltaic model of second-harmonic generation in glass fibers; the development of highly efficient Raman fiber lasers and optical amplifiers.

Dianov received the State Prize of the Russian Federation for infrared fibers in 1998 and Vavilov Gold Medal for studies of nonlinear processes in optical fibers and the development of fiber sources of radiation in visible and near IR spectral ranges based on nonlinear phenomena.

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 optic 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 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/100.

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.