IEICE Distinguished Lecturer, Biography, Hiroshi Takahashi
As of February, 2021

Hiroshi Takahashi joined NTT Opto-electronics Labs in 1988 and has been involved in research on optical waveguide devices. He invented the arrayed-waveguide grating (AWG) wavelength multi/demultiplexer and successfully introduced it into commercial dense WDM transmission systems. He was the research group leader at NTT Photonics Labs from 2004-2012 and led his team on various waveguide devices including optical switches, and optical modulators and demodulators for coherent transmission systems. He has a lot of expertise in optical waveguide theory, the waveguide fabrication process, integrated-optic circuits (also called planar lightwave circuits), signal processing and optical fiber communication systems.

He has experience in delivering invited and tutorial talks on optical waveguide devices in major international conferences as follows:

Silica-Based Waveguide Technology for Phase Modulation 100Gb/s Coherent Receiver, OFC 2010
Silica Waveguide Technologies for Advanced Transmission Systems, OECC 2010
Integrated Optics in Optical Communication Systems, OSA annual meeting 2010
High performance planar lightwave circuit devices for large capacity transmission, ECOC 2011
Active device integration on silica waveguide platform, OECC 2013
Fundamentals of optical waveguide and key points in photonic device design, MOC2015

He is now a professor at Department of Information and Communication Sciences in Sophia University. He is also the president in 2021 of the Electronics Society, IEICE. He is a Fellow of IEICE and IEEE.