

Workshop Speaker	
Full Name	Kyung-Sook Hyun
Affiliation	Sejong University
Presentation Title	Silicon photonics technologies for high-density optical interconnections
Biography	
<p>Kyung-Sook Hyun received the B.S. degree in physics from Seoul National University, Korea, in 1997 and M.S. degree and Ph. D degree in physics from KAIST, Korea, in 1989 and 1992, respectively. After joining ETRI, she worked on the field of optical communication systems and optoelectronic devices based on InP and GaAs. She joined Sejong University from 2001 and her current research interests include thin multiplication layer APD, square micro-cavity, micro-cavity single mode laser, integrated wavelength demultiplexer, and optical bio-sensors using silicon photonics. She is currently vice president of OSK and classification commissioner of KCS.</p>	
200 words abstract	
<p>The growing demand for photonics for biosensing applications leads to tremendous advances and improvements in integrated silicon photonic biochips based on CMOS manufacturing technologies. We review a variety of biosensing technologies being studied in both academia and industry. Recent progress of various kind of photonic biosensing Si platforms technology and their future commercialization will be discussed. For device examples, Mach-Zehnder interferometer with a slot waveguide and polarization selective input waveguide integrated ring resonators are introduced.</p>	