Industrial Session Speaker	
Name	Jomsool Kim
Affiliation	Laser Spectronix Ltd.
Presentation Title	Optical fiber beam delivery and beam shaping for industrial high power and high pulse energy lasers

Biography

Dr. Jomsool Kim received Ph.D. degree in physics from KAIST (Korea Advanced Institute of Science and Technology) in 1991 for his study on design and development of frequency stabilized, tunable laser and its application to high resolution laser spectroscopy on atomic vapors. He joined Korea Laser Technology Co. Ltd., as research scientist,and worked for commercial application of excimer laser and commercialization of He-Ne laser plasma tubes. He has served for 24 years as the president, since he founded his own company Laser Spectronix Ltd., to extend his experience and expertise to the commercial and industrial laser markets in Korea.

200 words abstract

Optical fiber delivery of industrial high power or high energy pulse lasers like fiber lasers, direct diode lasers, and diode-pumped solid-state lasers,has played a key role in various material processing due to the advantages of remote beam delivery and control, and further its beam shaping capability through specialty fibers.In this talk recent design and development of various commercial components for high power beam delivery including laser-to-fiber coupler, fiber-to-fiber coupler, fiber cables including specialty fibers, fiber collimator and focuser are reviewed and discussed in terms of beam parameters. A case design study of fiber delivery of high pulse energy dpss laser and flat-top beam shaping,and its application to silicon processing are presented and discussed. Furthermore, this talk includes our effort to respond to the rapidly growing demand from our market for industrial ultrafast laser beam delivery and beam shaping.