



Prof. Sangwoo Lim

(Yonsei University, South Korea)



Prof. Sangwoo Lim received his Ph.D. in Chemical System Engineering from the University of Tokyo, Japan in 1998 after B.S. and M.S. degrees in Chemical Engineering from Yonsei University, Seoul, Korea in 1992 and 1995, respectively. He was a postdoctoral research associate at the Department of Electrical Engineering and Department of Chemistry at Stanford University in 1998-2000. He was a Principal Scientist at Motorola (later Freescale Semiconductor) in 2001-2005. His main responsibility and accomplishments were to launch the plasma oxynitride integration technology to reduce gate leakage current density with EOT scaling down of CMOS 90 and 65 gate stacks.

He has been a professor at the Department of Chemical and Biomolecular Engineering, Yonsei University (Seoul, Korea) since 2005. He was a Visiting Professor at the Mechanical and Aerospace Engineering Department, UCLA in 2011-2012 and a Courtesy Professor at School of Chemical, Biological and Environmental Engineering, Oregon State University in 2018-2019.

Currently Prof. Lim is a President of Korea Semiconductor CMP UGM, Vice President, Korean Society of Semiconductor & Display Technology, Lead Organizer of the International Symposium on Semiconductor Cleaning Science and Technology, committee member of SEMICON KOREA SPS, and committee member of Korea Semiconductor Cleaning User's Group Meeting.

Prof. Lim's major research interest is to develop various chemical processes for semiconductor manufacturing. His representative research projects are: Highly selective Si_3N_4 etching for 3D NAND fabrication, Selective SiGe etching for GAA and DRAM, Highly selective SiO_2 etching for 3D DRAM fabrication, III-V semiconductor surface preparation, Environmentally Benign Cu slurry development, etc.