

KISM 2025 BUSAN

Re:Innovation of Semiconductor Manufacturing for AI Ecosystem

Mr. JANG WON JUN

School of Advanced Materials Science and Engineering, Sungkyunkwan University

Advanced R&D Center, Wonik IPS Co., Republic of Korea



Education

Materials Science & Engineering KOREA University, Seoul, Korea B.S. in Materials Science & Engineering (1988 ~ 1991) M.S. in Materials Science & Engineering (1992 ~ 1993)

Advanced Materials Science and Engineering, Sungkyunkwan Univ., Seoul, Korea D.S. in Advanced Materials Science and Engineering (2019 ~ Current)

R&D Center, Samsung Electronics (1994 ~ 2017)

- . Successfully developed MOCVD Ta2O5 Capacitor Module for 1G DRAM
- : Received the "Proud Samsung Award" from SEC chairman Kun-Hee Lee
- . Successfully researched and developed the world first **Plasma Nitridation** (the origin of DPN, SPA, MMT)
- . Developed RNC(Radical oxidation/NO anneal/Clean Oxidation) Tunnel Oxide
- . Key Development & Mass Production Transferred List
- : Spike RTA, Laser Anneal, Flash RTP etc.

Advanced R&D Center, Wonik IPS (2017 ~ Current)

- . Successfully developed High-/Low- Pressure Swing Anneal Equipment (first ever developed)
- : Received the "Proud Wonik Award" from Wonik chairman Yong-Han Lee