



Prof. Ogyun Seok

(Pusan Nat'l Univ., Korea)

Personal Information

Affiliation / Position: Associate Professor, School of Electrical and Electronic Engineering,
Pusan National University

Name: Ogyun Seok

Contact: +82-51-510-2371

Email: ogseok@pusan.ac.kr

Address: Room 206, Life Sciences Building, 2 Busandaehak-ro 63beon-gil, Geumjeong-gu,
Busan, Republic of Korea

Education

B.S. in Electronic Engineering, Kookmin University (Mar. 2004 – Aug. 2008)

M.S. in Electrical and Computer Engineering, Seoul National University (Sep. 2008 – Aug. 2010)

Ph.D. in Electrical and Computer Engineering, Seoul National University (Sep. 2010 – Aug. 2013)

Research Areas

- SiC Power Semiconductor Devices:
 - Development of 3.3 kV / 4.5 kV SiC DMOSFETs and 10 kV SiC PiN Diodes for HVDC applications
 - Development of 1.2 kV / 1.7 kV SiC DMOSFETs and TMOSFETs for electric vehicles
 - Development of lateral SiC MOSFETs for extreme environments
 - High-efficiency SiC JBS and MPS diode development
 - Research on core process technologies for SiC MOSFETs
 - Research on high-reliability SiC MOSFETs for space environments



- GaN Power Semiconductor Devices:
 - Development of 900 V-class AlGaIn/GaN HEMTs and diodes for DC-DC power conversion
 - Development of E-mode AlGaIn/GaN MOS-HEMTs
 - Analysis of high-k dielectric / GaN interface properties
 - Development of Au-free AlGaIn/GaN HEMT processes compatible with CMOS fabrication

Professional Experience

- Associate Professor, School of Electrical and Electronic Engineering, Pusan National University (Sep. 2025 – Present)
- Assistant Professor, School of Electrical and Electronic Engineering, Pusan National University (Sep. 2024 – Aug. 2025)
- Assistant Professor, Department of Electronic Engineering, Kumoh National Institute of Technology (Sep. 2020 – Aug. 2024)
- Technical Program Committee Member, APWS International Conference (Oct. 2023 – Present)
- Chair, Electrical Materials Technical Committee, Korean Institute of Electrical Engineers (Jan. 2024 – Present)
- Senior Researcher, Power Semiconductor Research Center, Korea Electrotechnology Research Institute (Aug. 2014 – Aug. 2020)
- Postdoctoral Research Associate, Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign (Sep. 2013 – Jul. 2014)