

PROFILE



KERI(KOREA ELECTROTECHNOLOGY RESEARCH INSTITUTE)
KERI, the Electrified World's Hub

- ✓ Semiconductor and Display
- ✓ Secondary Battery
- ✓ Advanced Biotechnology
- ✓ Hydrogen
- ✓ Artificial Intelligence (AI)
- ✓ Advanced Robotics and Manufacturing
- ✓ Advanced Mobility



Website QR

Information

Main Contact	+82-55-280-1114
Website	www.keri.re.kr
Purpose of Establishment	Contribution to the advancement of the national power and electricity industry through R&D of electric power and electricity and diffusion of outcomes, and provision of testing and certification service
Main Responsibilities	R&D, Testing&Certification, Other Business
Planned Recruitment	00 positions

Contact

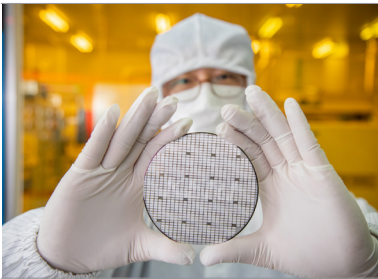
Department	Human Resource Development Department
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Key Achievements



Development of Next-Generation Energy Management System (EMS)



Development of SiC Power Semiconductors



Securing World-Class High-Voltage, High-Power Testing Capabilities (Ranked 2nd globally)

Research & Project List

Development of Digital Excitation Control System for Power Plants

Achieved technological independence in excitation control systems and improved power plant reliability and utilization through a digital triple-redundant control system.

Development of Korea Distribution Automation System(KODAS)

Enhanced distribution system reliability by minimizing blackout areas and outage duration, while optimizing the system to improve power quality and maximize utilization of power facilities.

Development of Reactor Control Rod Drive Control System for Nuclear Power Plants

Achieved Korea's first localization and commercialization of the nuclear power plant primary control system and improved plant availability through redundant architecture preventing single points of failure.

Development of Protection Technology against High Power Electromagneticse(HPEMP)

Developed a large-capacity varistor for HPEMP protection and surge protective devices, achieving world-class surge energy absorption performance in a single varistor body.

Localization of 765kV Electric Facilities

World's first commercialization of a 765kV double-circuit vertical AC transmission line and achieved technological independence in the design, construction, and maintenance of 765kV transmission facilities.

Development of High-Performance Electrode Technology Based on Nano Carbon Materials

Developed high-quality conductive inks using silver/CNT and copper/graphene hybrids, and high-capacity secondary batteries with silicon/graphene composite anode materials.

Performance Verification and Design Technology Development for Submarine ctric Propulsion System using LBTS

Contributed to submarine localization and completion of the world's third Land-Based Test Site (LBTS) for electric ships, reducing construction time by 368 days and saving KRW 420 billion.

Development of Core Material Technology for LowCost Mass Production of All-Solid-State Batteries

Developed the world's first mass synthesis technology for sulfide solid electrolytes and secured next-generation battery leadership with high-energy, high-safety battery technology