

KAIST NCS Job Description

Recruitment area	Research (Post-Doc)	분류체계	Parent category	Sub-category	Sub sub-category	Sub sub-sub-category
Mission						
KAIST's major businesses						

○ Korea Advanced Institute of Science and Technology (KAIST) Act

- Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development
- Carrying out the nation's mid- and long-term R&D, and basic and applied research to foster national competitiveness in science and technology
- Providing comprehensive support to research conducted by other research centers and industries

○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity

○ Research: Support for development of outstanding research projects, acquisition of specialized researchers, advancement of entrepreneurial culture, creation of high value-added intellectual property rights, promotion of technology transfer/commercialization, and development of large-scale, leading projects

○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership

○ Administration: Provision of administrative and technical service for international students/faculty (Support for operation of a "Korean-English bilingual campus")

<p>Growth engines</p>	<ul style="list-style-type: none"> ○ Vision: Global Value-Creative World-Leading University <ul style="list-style-type: none"> - Hub for Fostering Knowledge Creation and Global Convergence Talents - Center for the World-Leading New Knowledge and Technology) ○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies ○ 3C Leadership: Change, Communication, Care
<p>Duties and responsibilities</p> <p>Job performance details</p> <p>Knowledge required</p> <p>Required skills</p>	<ul style="list-style-type: none"> ○ Perform research and create knowledge as a post-doctoral researcher in the School of EE at KAIST <p>* To be determined within the following topics, considering the applicant's research experience and interest.</p> <ul style="list-style-type: none"> ○ Atomic layer deposition of ferroelectric and high-k dielectric together with electrical/reliability characterization ○ Research on dynamic transient switching phenomena in hafnia ferroelectric systems ○ Exploration of ferroelectric and anti-ferroelectric materials and functionalities ○ Research on ferroelectric transistor-based device/ion transport (for fundamental knowledge and neuromorphic devices) <p>Basic knowledge as a Ph.D. researcher in the field of ferroelectric materials and device in the EE background</p> <p>* Experience with some of the techniques below is preferred, but not necessarily required.</p> <ul style="list-style-type: none"> ○ deposition and characterization of hafnia ferroelectric thin films ○ Device characterization (DC and Transient Electrical Characterization) ○ Device Integration ○ Modeling and Simulation

Attitude while performing duties Basic skills	<p><input type="radio"/> Compliance with research ethics</p> <p><input type="radio"/> Active attitude and willingness to challenge</p> <p>Candidates and holders of Ph.D. degrees in science and engineering</p>
Reference site	<p>www.ncs.go.kr, www.kaist.ac.kr, antonis.kaist.ac.kr</p>