

NCS-Based KAIST Job Description – Research (Post-Doc)

Recruitment area	*Research (Post-Doc)	분류체계	대분류	중분류	소분류	세분류
			<i>19. Electrical Engineering</i>	<i>03. Electronic device development</i>	<i>06. Semiconductor development</i>	<i>04. Semiconductor material</i>
Mission	<ul style="list-style-type: none"> ○ Korea Advanced Institute of Science and Technology (KAIST) Act <ul style="list-style-type: none"> - 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 					
KAIST's major business	<ul style="list-style-type: none"> ○ 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") 					
Growth engines	<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 					
Duties and responsibility	<ul style="list-style-type: none"> ○ Next-generation semiconductors synthesis ○ High-performance optoelectronic devices fabrication 					
Job performance details	<ul style="list-style-type: none"> ○ Synthesis of hybrid perovskite nanoparticles ○ Fabrication of light emitting diodes, PVs, thermoelectric devices ○ Photophysical characterization of next-generation semiconductors 					
Knowledge required	<ul style="list-style-type: none"> ○ Chemistry, materials science, chemical engineering ○ Electrical engineering 					
Required skills	<ul style="list-style-type: none"> ○ Technique for synthesis of hybrid perovskite nanoparticles ○ Characterization of new materials (UV-Visible, Fluorimeter, Time Correlated Single Photon Counting System, IR spectrometer, GC, Cyclic voltametry, etc.) ○ Analysis of devices 					
Attitude while performing duties	<ul style="list-style-type: none"> ○ Attitude to explore new technical knowledge, active working attitude ○ Responsible attitude to get the job done to the end ○ Active participation in team-level research and task performance based on experience ○ An attitude to harmonize and collaborate with members of the organization ○ Observant to principles, clean and fair handling of tasks 					
Basic skills	communication skills, mathematical skills, problem-solving skills, interpersonal skills,					

	technical skills, organizational skills, understanding skills, professional ethics
Reference site	www.ncs.go.kr , www.kaist.ac.kr