

NCS-Based KAIST Job Description – Research position

Recruitment area	Research position	Classification system	Parent category	Sub-category	Sub sub-category	Sub sub-sub-category
			16. Material	02. Ceramic materials	01. Fine ceramic manufacturing	01. Electrical and electronic material manufacturing
			17. Chemical-Bio	01. Chemical materials-chemical fabrication	03. Development of chemical product	02. Development of chemical and novel materials
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 businesses	<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 responsibilities	<ul style="list-style-type: none"> ○ Development of the active materials for energy storage devices (Lithium metal battery and Lithium sulfur battery) and its synthetic process ○ Development of electrode materials based on 2D transition metal carbides/nitrides (MXene) ○ Development of nano-structure based on carbon fiber 					
Job performance details	<ul style="list-style-type: none"> ○ Synthesis of the active materials for lithium metal battery and lithium sulfur battery, and development of its synthetic process ○ Analysis of battery performance using electrochemical method ○ Approach for improvement of high oxidation stability in 2D transition metal carbide/nitrides (MXene) 					
Knowledge required	<ul style="list-style-type: none"> ○ Material Science, Electrochemical Engineering, Chemical Engineering, Mechanical Engineering 					

Required skills	<ul style="list-style-type: none">○ Ability to synthesize and design for the active materials and its synthetic process○ Material characterizations with XRD, XPS, SEM, TEM○ Advanced electrochemical analysis
Attitude while performing duties	<ul style="list-style-type: none">○ Creative and challenged, Logical○ Positive○ High responsibility○ High mutual cooperation
Basic skills	<ul style="list-style-type: none">○ Communication, Flexibility, Work ethics, Interpersonal skill○ Fluent Korean language, High vocational ethics
Reference site	www.ncs.go.kr , www.kaist.ac.kr