

## NCS-Based KAIST Job Description – Research position

Recruitment area	Research position	Classification system	Parent category	Sub-category	Sub sub-category	Sub sub-sub-category
			<i>16. Material</i>	<i>02. Ceramic materials</i>	<i>01. Fine ceramic manufacturing</i>	<i>01. Electrical and electronic material manufacturing</i>
			<i>15. Mechanical</i>	<i>01. Mechanical design</i>	<i>01. Mechanical design</i>	<i>03. Structural Analysis Design</i>
Mission	<ul style="list-style-type: none"> <li>○ Korea Advanced Institute of Science and Technology (KAIST) Act               <ul style="list-style-type: none"> <li>- Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development</li> <li>- Carrying out the nation's mid- and long-term R&amp;D, and basic and applied research to foster national competitiveness in science and technology</li> <li>- Providing comprehensive support to research conducted by other research centers and industries</li> </ul> </li> </ul>					
KAIST's major businesses	<ul style="list-style-type: none"> <li>○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity</li> <li>○ 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</li> <li>○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership</li> <li>○ Administration: Provision of administrative and technical service for international students/faculty (Support for operation of a "Korean-English bilingual campus")</li> </ul>					
Growth engines	<ul style="list-style-type: none"> <li>○ Vision: Global Value-Creative World-Leading University               <ul style="list-style-type: none"> <li>- Hub for Fostering Knowledge Creation and Global Convergence Talents</li> <li>- Center for the World-Leading New Knowledge and Technology)</li> </ul> </li> <li>○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies</li> <li>○ 3C Leadership: Change, Communication, Care</li> </ul>					
Duties and responsibilities	<ul style="list-style-type: none"> <li>○ <i>Development of the active materials for ionic soft actuator</i></li> <li>○ <i>Mechanical application of 3D phononic topological insulator</i></li> </ul>					

Job performance details	<ul style="list-style-type: none"> <li>○ Synthesis of the active materials for ionic soft actuator and analysis of electrochemical properties</li> <li>○ Design and construction of 3D phononic topological insulator</li> </ul>
Knowledge required	<ul style="list-style-type: none"> <li>○ Material Science, Electrochemical Engineering, Chemical Engineering</li> <li>○ Acoustic, Elastics, Solid State Physics</li> </ul>
Required skills	<ul style="list-style-type: none"> <li>○ Ability to synthesize and design for the active materials</li> <li>○ Material characterizations with XRD, XPS, SEM, TEM</li> <li>○ Advanced electrochemical analysis</li> <li>○ Control and measurement of the mechanical wave</li> </ul>
Attitude while performing duties	<ul style="list-style-type: none"> <li>○ Creative and challenged, Logical</li> <li>○ Positive</li> <li>○ High responsibility</li> <li>○ High mutual cooperation</li> </ul>
Basic skills	<ul style="list-style-type: none"> <li>○ Communication, Flexibility, Work ethics, Interpersonal skill</li> </ul>
Reference site	<p>www.ncs.go.kr, www.kaist.ac.kr</p>