

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

Recruitment area	*Research (Post-Doc)	분류체계	대분류	중분류	소분류	세분류
			*17 Chemistry	*01. Chemical substance and chemical process management *03..Manufacture of precision chemical manufacturing	Chemical Substances - Quality assurance medicine fertilizer- pesticide	Chemical substance Pharmaceutical R&D pesticide
Mission	<ul style="list-style-type: none"> <li>○ Korea Advanced Institute of Science of Technology (KAIST) Act</li> <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>					
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</li> <li>- Hub for Fostering Knowledge Creation and Global Convergence Talents</li> <li>- Center for the World-Leading New Knowledge and Technology)</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>○ Various simulations of biopolymers</li> <li>○ analysis of simulation data and paper writing</li> <li>○ Operation management and maintenance of simulation hardware</li> </ul>					
Job performance details	<ul style="list-style-type: none"> <li>○ Simulation of MD and MC</li> <li>○ Source editing of simulation program</li> <li>○ GPFS (spectrum scale) and SGE based system operation for the entire lab</li> </ul>					
Knowledge required	<ul style="list-style-type: none"> <li>○ statistical mechanics, quantum electronic structure theory</li> <li>○ IBM whitepaper level understanding of GPFS management</li> </ul>					
Required skills	<ul style="list-style-type: none"> <li>○ C and Fortran code writing</li> <li>○ GPFS system management</li> </ul>					
Attitude while performing duties	<ul style="list-style-type: none"> <li>○ 9+ hours/day and 5+ days/week work ethic with institute-allowed vacation limit</li> <li>○ Within 2- hour response time to HPC cluster system errors (remote access allowed)</li> </ul>					
basic skills	<ul style="list-style-type: none"> <li>○ Post-graduate level statistical mechanics and quantum chemistry</li> <li>○ Versatile computer management within Linux; Fluent commands on Fiber channel storage sys.</li> </ul>					
reference site	www.ncs.go.kr, www.kaist.ac.kr					