

NCS-Based KAIST Job Description – Fixed-term (Postdoctoral Researcher)

Recruitment	Postdoctoral Researcher	Classificatio n system	Parent category	Sub-category	Sub sub-category	Sub sub-sub- category
area			Category : Quantum optics Sub-category : Ultrafast quantum optics and ultrafast quantum spectroscopy			
Mission	 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 					
KAIST's major businesses	 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	 Vision: Global Value-Creative World-Leading University 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	• Research / Educational support					
Job performance details	 To perform research on ultrafast quantum optics and ultrafast quantum spectroscopy To develop new theoretical descriptions of novel ultrashort quantum states of light and their applications to study properties of highly entangled quantum systems To help to supervise a PhD student working on the same project 					
Knowledge required	 Theoretical quantum optics physics knowledge Broad general knowledge of analytical methods in quantum physics 					
Required skills	 Numerical simulations skills Ability to present the research results in good English, including writing scientific papers 					



Attitude while performing duties	 Attitude for an analytical thinking and objective views Attitude for collaborating with the other group members 		
Basic skills	 Problem solving ability Ability to use mathematical methods 		
Reference site	www.ncs.go.kr, <u>www.kaist.ac.kr</u>		