

【Job Description for Research Scientist(Full-time) Recruitment No.1】

Area of recruitment	Development and Application Research of Optics-Based Thermal Analysis Systems				
Academic major	Electrical & Electronic Eng., Mechanical Eng., Material Eng., and Physics - related majors	Job position	Research Scientist	Locations	Daejeon
NCS category	Main Category	Category		Sub-Category	
	A separate analysis was performed to prepare the following contents as the NCS has not developed job categories corresponding to the job duties				
KBSI mission	<ul style="list-style-type: none"> □ Conducting R&D on research facilities & equipment and analytical S&T, and joint research and support for promoting basic science, the foundation of the national science and technology development 				
KBSI main functions	<ul style="list-style-type: none"> □ Research support and joint research through the development and operation of cutting-edge large-scale research equipment □ Development of analytical technology and equipment through analytical science research □ In charge of general management of national research facilities and equipment □ Fostering research equipment experts and creative future talent 				
General requirements	Age and gender	Not specified			
Educational requirements	Academic Background	Doctoral degree			
Required job duties	<ul style="list-style-type: none"> □ Development of Optics-Based Thermal Analysis System □ Development and Application Research of Semiconductor/Display Metrology & Inspection Systems □ Research on the Measurement and Analysis of Thermal Properties of Materials and Devices 				
Capacity and ability	<ul style="list-style-type: none"> □ Ability to Develop Hardware and Software for Optical Instruments □ Ability to Conduct Research on the Metrology, Inspection, and Thermal Analysis of Materials and Devices □ Ability to Write Research Papers and Patents 				
Required knowledge	<ul style="list-style-type: none"> □ Knowledge in Optics or Thermal Engineering □ Knowledge Related to the Development of Hardware and Software for Scientific Research Instruments 				
Required skills	<ul style="list-style-type: none"> □ Skills in the Development of Hardware and Software for Optical Equipment or Thermal Analysis Equipment □ Skills in Research Related to the Measurement and Analysis of Thermal Properties of Materials and Devices 				
Attitude in performing duties	<ul style="list-style-type: none"> □ Proactive, responsible, and diligent attitude to solve a problem □ An exploratory attitude towards new knowledge and skills □ Positive and active communication attitude □ Efforts oriented towards teamwork 				
Reference websites	<ul style="list-style-type: none"> □ www.ncs.go.kr (except for the undeveloped jobs in NCS) - The above job description was prepared through a separate analysis. □ http://www.kbsi.re.kr (KBSI website) □ https://kbsi.recruiter.co.kr (KBSI application site) 				

※ The above duties are the main duties that the applicant will perform upon employment after being selected as the successful applicant, and the applicant may perform duties other than the main job duties and the place of work may also be changed.

【Job Description for Research Scientist(Full-time) Recruitment No.2】

Area of recruitment	High Homogeneity / High Field Superconducting (SC) Magnet Research				
Academic major	Physics, Mechanical Engineering, Electrical Engineering, Electronic Engineering, or any major relevant superconducting magnet	Job position	Research Scientist	Locations	Daejeon or Ochang
NCS category	Main Category	Category		Sub-Category	
	A separate analysis was performed to prepare the following contents as the NCS has not developed job categories corresponding to the job duties				
KBSI mission	<ul style="list-style-type: none"> □ Conducting R&D on research facilities & equipment and analytical S&T, and joint research and support for promoting basic science, the foundation of the national science and technology development 				
KBSI main functions	<ul style="list-style-type: none"> □ Research support and joint research through the development and operation of cutting-edge large-scale research equipment □ Development of analytical technology and equipment through analytical science research □ In charge of general management of national research facilities and equipment □ Fostering research equipment experts and creative future talent 				
General requirements	Age and gender	Not specified			
Educational requirements	Academic Background	Doctoral degree			
Required job duties	<ul style="list-style-type: none"> □ Research and planning of high field SC magnets technology □ Design, manufacturing, and evaluation of high field SC magnets and cooling systems □ Multiphysics analysis and protection systems development of high field SC magnets 				
Capacity and ability	<ul style="list-style-type: none"> □ Experience in the development of high field SC magnet systems □ Experience in research for 2G high-temperature superconducting(HTS) magnets □ High field SC magnet Electromagnetic, thermal, and mechanical analysis capabilities □ Ability to plan R&SD for a high field SC magnet based research facility, etc. □ Research management, research paper/report writing 				
Required knowledge	<ul style="list-style-type: none"> □ General knowledge of SC magnet design, fabrication, and evaluation for HTS magnet system development □ Knowledge of screening current-induced magnetic field reduction, stress analysis technology and magnet protection knowledge □ Knowledge of SC magnet cooling and mechanical structure technology □ Knowledge of latest trends of the high field SC magnet research 				
Required skills	<ul style="list-style-type: none"> □ Multiphysics analysis and related software skills □ Electronic device operation skills (measurement and control interface, measurement data real-time processing coding) □ Measurement data post-processing skills/physical and engineering data analysis skills 				
Attitude in performing duties	<ul style="list-style-type: none"> □ Proactive, responsible, and diligent attitude to solve a problem □ An exploratory attitude towards new knowledge and skills □ Positive and active communication attitude □ Efforts oriented towards teamwork 				
Reference websites	<ul style="list-style-type: none"> □ www.ncs.go.kr (except for the undeveloped jobs in NCS) - The above job description was prepared through a separate analysis. □ http://www.kbsi.re.kr (KBSI website) □ https://kbsi.recruiter.co.kr (KBSI application site) 				

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