

※ This announcement is for foreigners who have difficulty using Korean.

As a government-funded research institution, Korea Research Institute of Standards and Science (KRISS) performs research involving basic and original technology in all areas of science and technology. Based on the National Competency Standards associated with blind recruitment, it now calls for competent scientists from various areas who are encouraged to pursue their dream and passion at KRISS.

## □ Area for employment

Field		Assigned task	Personnel	Code
Physical Metrology	Multiscale length metrology	<ul style="list-style-type: none"> <li>Development of fiber mode-locked laser for precision dimensional metrology</li> <li>Frequency comb based ultraprecision laser interferometer</li> </ul>	1	A01
	5G플러스 (YS사업*)	Only Koreans can apply	1	A02
Chemical and Biological Metrology	바이오물질량 (YS사업*)	Only Koreans can apply	1	B01
	미생물분석표준 (YS사업*)	Only Koreans can apply	1	B02
	첨단유기분석 (YS사업*)	Only Koreans can apply	1	B03
Advanced Instrumentation	Optical Nano Metrology	<ul style="list-style-type: none"> <li>Research and development of real-time nano-optical measurement technology for core measuring devices for semiconductor and display processes</li> </ul>	1	C01
	Semiconductor Integrated Metrology	<ul style="list-style-type: none"> <li>2D material synthesis research for the development of novel sensor</li> <li>Development of organic material and part impurity analysis system</li> </ul>	1	C02
	Laser nano-engineering	<ul style="list-style-type: none"> <li>Instrumentation for Ultrafast laser nano-processing</li> <li>Application of ultrafast laser processing for material science</li> </ul>	1	C03
	GHG metrology1	<ul style="list-style-type: none"> <li>Development of optical frequency comb based precision molecular spectroscopy (frequency stabilized CRDS, Dual comb spectroscopy, Cavity enhanced spectroscopy)</li> </ul>	1	C04
	GHG metrology2	<ul style="list-style-type: none"> <li>Stable isotope ratio analysis using Isotope Ratio Mass Spectrometer</li> </ul>	1	C05
	GHG metrology3	<ul style="list-style-type: none"> <li>Analysis of halogenated GHGs using Gas Chromatography with Mass spectrometer and Gas Chromatograph with Atomic Emission Detector</li> <li>Improvement of preconcentration device for atmospheric level halogenated GHGs</li> </ul>	1	C06
	Optical Imaging and Metrology	<ul style="list-style-type: none"> <li>Development of real-time 3D measurement technique for complex freeform surfaces</li> </ul>	1	C07

Field		Assigned task	Personnel	Code
	Space Optics	<ul style="list-style-type: none"> <li>• Optical design and system alignment</li> <li>• Research on wavefront sensor and laser interferometer</li> </ul>	1	C08
	Atomic-scale measurement	<ul style="list-style-type: none"> <li>• Research on 2D materials/strongly correlated electron systems using computer codes based on DFT(+DMFT) method.</li> <li>• DFT(+DMFT)-based methodology/code development</li> </ul>	1	C09
Quantum Technology	양자자기측정 (YS사업*)	Only Koreans can apply	1	D01
Interdisciplinary Materials Measurement	Hyperspectral Nano-imaging	<ul style="list-style-type: none"> <li>• Developing hyper-spectral near-field imaging in liquid phase</li> <li>• Developing nonlinear spectroscopic nanoimaging</li> <li>• Analyzing nanoscale optical/electrical/chemical properties of novel nano-composite material /device</li> </ul>	1	E01
	AI Metamaterial Research1	<ul style="list-style-type: none"> <li>• Fundamentals and Applications of AI</li> <li>• AI-based system diagnosis technique</li> </ul>	1	E02
	AI Metamaterial Research2	<ul style="list-style-type: none"> <li>• Vibration/Acosutic/Ultrasonic simulation and analysis</li> <li>• Vibration/Acosutic/Ultrasonic experiments and data analysis</li> </ul>	1	E03
	Smart devices1	<ul style="list-style-type: none"> <li>• Collection and AI utilization of materials research data</li> <li>• Data-driven new materials design and development</li> </ul>	1	E04
	Smart devices2	<ul style="list-style-type: none"> <li>• Development of material and device technology for thermoelectric cooling</li> <li>• Development of smart device with built-in cooling module</li> </ul>	1	E05
	Smart devices3	<ul style="list-style-type: none"> <li>• Development of organic/inorganic electrode materials and evaluation technique for Li-ion battery</li> <li>• Development of measurement protocol for organic redox flow battery</li> </ul>	1	E06
	Smart devices4	<ul style="list-style-type: none"> <li>• Development of electrochemical scanning measurement technique for LIB electrodes</li> <li>• Materials synthesis based on electrochemical deposition</li> </ul>	1	E07
	스마트 소자5 (YS사업*)	Only Koreans can apply	1	E08
	Extreme Measurement Science	<ul style="list-style-type: none"> <li>• Molecular/atomic scale structural measurement using synchrotron x-ray and laser (CW-femtoseconds) based diagnostics</li> <li>• Real-time measurement under dynamic conditions and inline data analysis</li> <li>• Preparation of sample manipulation and conditions for the in-situ measurement</li> </ul>	1	E09
	저차원소자물질 연구 (YS사업*)	Only Koreans can apply	1	E10

Field		Assigned task	Personnel	Code
Safety Measurement	Bioimaging1	<ul style="list-style-type: none"><li>• Developments of optical imaging technologies for bio and medical fields (optical coherence tomography, nonlinear optical microscopy, photoacoustic imaging, etc.)</li><li>• Developments of image processing and analysis technologies for biomedical photonics fields</li></ul>	1	F01
	Bioimaging2	<ul style="list-style-type: none"><li>• Developments of optical microscopy technologies (Digital holographic microscopy, dark-field microscopy, hyperspectral microscopy, etc.)</li><li>• Developments of nanomaterials distribution analysis technologies in cells and tissues for nano-safety</li></ul>	1	F02
	Bioimaging3	<ul style="list-style-type: none"><li>• Cellular and tissue toxicology of nanomaterials (nanoparticles, nanofibers, etc.)</li><li>• Pathological mechanism study based on 3-D bioimaging</li></ul>	1	F03
	Bioimaging4	<ul style="list-style-type: none"><li>• Fabrication of nano-structure based on nano-patterning</li><li>• Performing nano patterning and vacuum deposition process</li></ul>	1	F04
	Bioimaging5	<ul style="list-style-type: none"><li>• Development of biocompatible nanomaterials for disease diagnosis and treatment</li><li>• Development of smart theranostic system and application for multimodal imaging</li></ul>	1	F05
	High-temperature properties of metal materials	<ul style="list-style-type: none"><li>• Thermal-mechanical fatigue test</li><li>• Material property data system construction</li></ul>	1	F06
	Analysis of microstructural evolution and hydrogen embrittlement mechanism for metallic materials	<ul style="list-style-type: none"><li>• Analysis of microstructural evolution for alloy steels</li><li>• Analysis of correlation between mechanical properties and microstructure</li><li>• Analysis of hydrogen embrittlement mechanisms</li></ul>	1	F07
	Nanosafety	<ul style="list-style-type: none"><li>• Development of nanomaterial safety measurement technology using three-dimensional cell culture method (spheroids and organoids)</li></ul>	1	F08
R&D Policy and Technology Services	National Center for Standard Reference Data	<ul style="list-style-type: none"><li>• A Study on Data Reliability for National Reference Standard System Operation<ul style="list-style-type: none"><li>– Data traceability and uncertainty</li></ul></li><li>• A Study on AI Reliability for National Reference Standard System Operation<ul style="list-style-type: none"><li>– Data·AI Reliability</li></ul></li></ul>	1	G01

※ Candidates can only apply in one of the recruitment fields, and if overlapping or cross-applications are confirmed, admission is cancelled.

## □ Eligibility

Classification	Description
Post-doc.	<ul style="list-style-type: none"><li>○ Eligibility requirements<ul style="list-style-type: none"><li>- Those who do not fall under the reasons for disqualification for appointment<ul style="list-style-type: none"><li>• Those who have not suspended or deprived voting rights by law</li><li>• Those who have not evaded military service obligations</li><li>• Those who have not been caught for fraudulent employment</li><li>• Those who have not been dismissed due to misconduct</li><li>• Those without reasons for disqualification for overseas travel</li></ul></li><li>- Those who earned their Ph.D. within the past 5 years or will earn their Ph.D. within the next 3 months as of the scheduled date of employment</li><li>- Those who published (registered) at least one SCIE thesis or international patent within the past 3 years(Excluding policy and Technology Services fields)<ul style="list-style-type: none"><li>• Limited to first author or corresponding author for articles (limited to the research performance within the recent 3 years as of the end date of receipt of application forms)</li><li>• Limited to main inventor for international patents that have been registered with the patent office in the United States, Japan or Europe. Any article and patent with the same substance will be regarded as a single item</li></ul></li></ul></li><li>○ Preferential treatment<ul style="list-style-type: none"><li>- Those of national merit, those eligible for employment support, those with a disability and Women in science and technology are eligible for preferential treatment if they submit evidentiary documents</li><li>- Women in science and technology</li></ul></li></ul>

## □ How to apply

- Online application for the KRISS job page (<https://kriss.recruiter.co.kr/>)
- Period for submission: Jan 3, 2022 (Mon) ~ Jan 17, 2022 (Mon), 13:00
  - ※ Korean time(GMT+9)

## □ Process

Process	Description
1st screening (Document )	<ul style="list-style-type: none"><li>○ Evaluation of expertise and competence in each area for employment<ul style="list-style-type: none"><li>– Evaluation items: Performance, experience, capability, and competence</li><li>– Criteria for passing: Each applicant will be evaluated with a five-point scale in comprehensive consideration of evaluation items. Applicants who earn high scores among those who earn at least 80 points on average based on the aggregate points granted by each evaluator.</li></ul></li></ul>
Online personality test	Koreans only
2nd screening (interview)	<ul style="list-style-type: none"><li>○ Research performance seminar and personality interview<ul style="list-style-type: none"><li>– Evaluation items: Basic attitude, thinking ability, presentation ability, potential, knowledge</li><li>– Criteria for passing: Applicants who earn high scores among those who earn at least 80 points on average based on the aggregate points granted by each evaluator.</li></ul></li></ul>

※ Applicants who reside overseas may have a video interview in the 2nd screening.

## □ Required documents

Classification	Description
Application form	<ul style="list-style-type: none"><li>○ Self-introduction, experience statement, article and patent performance list/proof, etc.</li><li>※ Fill out through the online job posting website</li></ul>
2nd screening	<ul style="list-style-type: none"><li>○ Presentation materials of research performance seminar</li></ul>
After 2nd screening	<ul style="list-style-type: none"><li>○ Transcripts/certificates of graduation of all university/graduate school programs</li><li>○ Proof of career/employment, copies of certificates of qualifications, certificate of military service (if applicable)</li><li>○ Certificate of disability, certificate of eligibility for employment protection (if applicable)</li></ul>

## ☐ Timeline

Process	Date	Remarks
Employment notice	Jan 3 ~ Jan 17, 2022	Timeline subject to change due to the institution's circumstances
Receipt of application forms	Jan 3 ~ Jan 17, 2022	
1st screening	Late Jan, 2022	
2nd screening	Mid Feb, 2022	
Announcement of successful applicants of 2nd screening	Late Feb, 2022	
Scheduled date of employment	Mar 1, 2022	

## ☐ Training conditions

구 분	세부 내용
Term of contract	<ul style="list-style-type: none"> <li>○ Contract within one year <ul style="list-style-type: none"> <li>※ Training is possible until the end of the project in the 5th year after obtaining the maximum doctoral degree.</li> <li>※ If the result of training evaluation is insufficient, the training period cannot exceed 3 years</li> </ul> </li> </ul>
Working conditions	<ul style="list-style-type: none"> <li>○ Wage: To be determined through career grading applicable to regular employees based on the institution's own evaluation criteria</li> </ul>

## □ Other information

- Failure to comply with the blind recruitment requirements during screening may result in penalties such as deductions.

- Do not write prejudice factors such as age, gender, and graduation school in the self-introduction letter (however, you can fill out prejudice factors if requested directly on the application form.)
- If it is unavoidable to write a prejudice factors in the self-introduction letter, write it as follows.
  - ※ Ex: OO University or University A
- When submitting proof of article or patent, please mask information that can infer the school you graduated from.
  - ※ Ex: University name, university e-mail, advisor name, etc.

- No one may be employed if no applicant is found qualified after the screening process
- Candidates are responsible for any disadvantages due to omission of documents to be submitted or false entry or submission
- Acceptance and appointment may be canceled if fraudulent behavior or false entry in the application form is found during the screening process.
- If you have any questions, contact the recruitment site Q&A.
  - Email: nams@kriss.re.kr