

PROFILE

KRIS

Korea Research Institute of Standards and Science (KRIS)

As Korea's National Metrology Institute, KRIS establishes and disseminates the measurement standards that drive science, industry, and daily life.

- ✓ Semiconductor and Display
- ✓ Secondary Battery
- ✓ Advanced Biotechnology
- ✓ Hydrogen
- ✓ Artificial Intelligence (AI)
- ✓ Advanced Robotics and Manufacturing
- ✓ Quantum Technology



Website QR

Information

Main Contact

+82-42-868-5114

Website

<https://www.kriss.re.kr/eng>

Purpose of Establishment

As the National Metrology Institute designated under the Framework Act on National Standards, KRIS establishes and maintains Korea's national measurement standards, advances measurement science and technology, and disseminates them to industry and society, thereby contributing to national economic growth and a better quality of life.

Main Responsibilities

- Standards: Establish, maintain and improve national measurement standards
- Science: Conduct research and development in measurement science and technology
- Service: Disseminate measurement standards and technology and provide support services

Planned Recruitment

9 positions

Contact



Department

Office of Human Resources Management



Phone

+82-42-868-5511

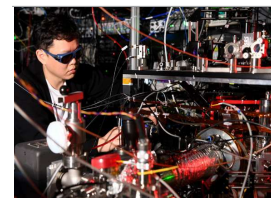


E-mail

recruitment@kriss.re.kr



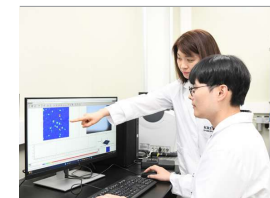
Key Achievements



Ytterbium Optical Clock (KRIS-Yb1): accurate to one second in 2 billion years, and Korea's contribution to Coordinated Universal Time.



20-Qubit Superconducting Quantum Computing
Development: a Korea-developed system that lets researchers run quantum computations remotely.



Ultra-Sensitive Alzheimer's Diagnostics: a SERS platform quantifying biomarkers in body fluids 100,000 times more sensitively than fluid tests

Research & Project List

Development of World-Leading Technology in Physical Measurement Standards

Developing world-leading physical measurement standards and breakthrough technologies in measurement standards

Development of high-performance superconducting quantum computer with error correction

Development of ultra-high-performance qubit devices featuring a 100-qubit-class surface code structure for error correction

Developing digital safety measurement to enhance the availability of smart structural monitoring of facilities

Development of Reliable, High-Precision Measurement Technologies for Efficient Structural Safety Monitoring

Strategic Research Group for Hyper-Connected, Scalable Super-Quantum Computing

Research and development of quantum algorithms and software for multi-core quantum computing

Development of quantum-based measurement technologies

Development of core measurement technologies for characterizing devices and systems based on quantum phenomena to advance next-generation quantum applications and future standards

Development of a Ytterbium(Yb)-Based 1,000-Qubit Neutral-Atom QPU Platform

Develop a 1,000-qubit-class neutral-atom QPU platform based on domestically developed technology to implement a system capable of large-scale adiabatic quantum computing

National Measurement Standards Services and Technical Support for Industries

Promoting national measurement standards services through demand-driven dissemination of research outcomes and industry support for measurement technology adoption

Establishment of basic performance evaluation platform for vacuum materials, parts and equipment for next-generation device manufacturing process

Establishing a basic performance evaluation infrastructure for vacuum equipment, parts, and materials to boost semiconductor yields.