■ Job Information

Subject No.	2027R-70
Job Title	Fixed Term Researcher
Department	Advanced ICT Research Institute / Kobe Frontier Research Center, Superconductive ICT Device Laboratory
Work Contents （Research theme)	Research and Development of Large-Scale Multi-Channel, Highly Integrated Superconducting Strip Photon Detection Systems
Detail of Work Contents	This theme aims to develop large-scale multi-channel, highly integrated photon detection systems based on superconducting strip photon detectors. By optimizing detector architectures and advancing signal multiplexing, high-density integration, and cryogenic readout technologies, we will realize scalable photon detection systems capable of efficiently integrating a large number of detection channels. The Article 15(2) of the Act on the activation of Science, Technology and Innovation will be applied to this work content.
	In accordance with the policy of the Japanese government decided on February 12, 2020 (https://www8.cao.go.jp/cstp/compefund/jisshishishin.pdf), employees to be hired through this recruitment may apply for external competitive research fundings such as Grant-in-Aid for Scientific Research (KAKENHI) and NICT's internal research fundings if conditions of employees meet the requirements of the policy.
Application requirement	・Doctor's degree or higher in Physics, Applied Physics, Electrical and Electronic Engineering, Information Engineering, Materials Science, or a related field, or expected completion prior to the start date. ・Research and development experience in superconducting devices, quantum devices, photonic detectors, semiconductor devices, electronic circuits, or related technologies. Experience with superconducting strip photon detectors is desirable. ・Ability to independently conduct experimental measurements, data analysis, and dissemination of research results. ・Strong communication skills and ability to collaborate effectively with domestic and international researchers. ・Experience in superconducting thin-film fabrication, electron-beam lithography, nanofabrication processes, and cleanroom-based research is desirable. ・Knowledge of, or experience in, signal multiplexing, high-frequency circuits, and cryogenic measurement technologies is desirable. ・Experience in publishing scientific papers in English and presenting at international conferences is desirable.
Recruiting (Number of people)	1
Contract period	hiring date ～ March 31,2028 N.B. Contract could be renewed.
The employment period in case of fully renewing	Up to 4years if certain conditions are fulfilled
Salary (basic salary)	¥541,000 ～ ¥558,000/month Basic salary shall be determined by taking into account each employee's experience and task to be engaged in. However, as a basic salary is compliant with government employees' wages, it shall be changed when a basic salary is changed after labor union and the like of NICT agreed under a revision to the government employees' wages.
Work Place	Advanced ICT Research Institute (Iwaoka, Nishi-ku, Kobe-shi, Hyogo)
Working frequency	5days/week（7.5hours/day）

* Scope of change in work and workplace：No changes are expected in general
* The expressions used in "Work Contents (Research theme)" and "Detail of Work Contents" and the names of "Department" and "Work Place" may be subject to change due to organizational restructuring or other reasons.

NICT Fixed Term Positions Job Announcement: https://www.nict.go.jp/en/employment/index-e-top.koubo.html