

Recruitment information: A Researcher  
for Department of Electronics, Graduate School of Engineering  
Nagoya University, Japan

1. Affiliation

Nagoya University, Faculty of Engineering Building No.3  
(Higashiyama Campus : 1 Furo-cho, Chikusa-ku, Nagoya, Aichi, Japan)

2. Number of Positions

One researcher

3. Expected Starting Date

Earliest Possible date After September 1<sup>st</sup>,2020

4. Research Outline

Research on superconducting single-photon detectors and their applications to quantum optics. The project aims to develop the superconducting nanowire single-photon detectors (SNSPDs) with the high efficiency, high functionality, and/or novel device structures as well as the quantum optics techniques based on the SNSPDs.

5. Research Themes

To realize the quantum optic network based on the superconducting single-photon detectors, the research themes are as follows:

- 1) Developments of the SNSPDs with a Gifford-McMahon cryocooler system and the performance improvements of the SNSPD systems.
- 2) Applications of the SNSPD systems to the quantum optics experiments.

6. Qualifications

A person with a doctorate or a person who expects to obtain a doctorate by the time of arrival.

7. Recruitment fields

- 1) Superconducting electronics and/or quantum optics.

Applicants who are motivated to work on the development and application of the SNSPD systems with backgrounds of the nanofabrication, implementation technique for the cryocooler, and/or classical optics are also favorable.

8. Period of Employment

1 year until March 31,2021 and employment renewal every year.

9. Working Condition

Discretionary labor system

Holiday: Saturdays, Sundays, national holidays, New Year's holidays (December 29-January 3)

Vacation: Annual paid vacation (6 months after employment), summer vacation (university designated date)

Subscription Insurance: health insurance, welfare pension, employment insurance, worker's compensation insurance

10. Salary

Salary will depend on quantifications experience, based on Nagoya University's Rules for Employees to whom the Annual Salary System applies.

11. Selection method

After screening for documents, we conduct interviews and decide on the acceptance.

12. Application Documents

Send a set of the following items by mail to the address below with a note “Application to researcher for department of electronics, graduate school of engineering Nagoya University” written in red on the front of the envelope together with sending pdf file of the following items by e-mail. Or an USB memory stick with a set of above information included as a pdf file.

- (1) Curriculum vitae with face photograph and e-mail address
- (2) List of publications (Original referred articles, International conference proceedings, Reviews, Books, Patents, Awards, Invited lectures, etc.)
- (3) Reprints of three representative publications
- (4) Other items the applicant considers useful for selection (education experiences, social activities, etc.)
- (5) A list of acquired research funds
- (6) Research plan and essay on applicant’s policy on education (about 1-2 pages)
- (7) Name, affiliation, and e-mail address of one contact references

13. Deadline

June 26, 2020 (Deadline for receipt)

As soon as the candidate is confirmed application is closed.

14. Enquiry about the position

Prof. Taro Yamashita

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1 Furo-cho, Chikusa-ku, Nagoya, Aichi, 464-8603, Japan

Phone: +81-52-789-3158 (secretary)

E-mail: [yamashita@nuee.nagoya-u.ac.jp](mailto:yamashita@nuee.nagoya-u.ac.jp)

15. Personal information submitted in connection with this public offering shall be used only for the purpose of selection and, after completion of selection, all personal information will be discarded responsibly, except for the information of those who have passed the selection.