

March 25,2025

**Recruitment of the faculty position in the Research Center for Integrated Quantum
Electronics, Hokkaido University**

We invite applications for the faculty position in the Research Center for Integrated Quantum Electronic, Hokkaido University as follows.

1. Position

Associate Professor

2. Department

(Immediately after hiring) Research Center for Integrated Quantum Electronics, Research Area for Advanced Electronic Nanomaterials

(Scope of change) Location as determined by the University.

3. Research Fields and Duties

(Immediately after hiring) Research field of innovative electronics contributing to the development of advanced information society with low environmental impact. In particular, one will be in charge of the research of following and their interdisciplinary areas. (1) Research area to explore novel electronic materials, their processing, and their device applications based on controlled semiconductor nanostructures with atomic precision, or heterogeneously integrated structures and junctions utilizing nanomaterials. (2) Research area to explore and understand novel functions of semiconductors based on the advanced technology and knowledge of crystal growth and material properties. (3) Research area to explore novel functional devices and high-speed devices towards future eco-friendly electronics or photonics-electronics convergence utilizing next-generation semiconductors and related materials.

(Scope of change) Duties as determined by the University.

4. Works in Charge

In Division of Electronics for Informatics, Graduate School of Information Science and Technology, (1) co-handling the following subjects: “Quantum Nanoelectronics”, “Advanced Exercise in Electronics for Informatics”, and “Advanced Study in Electronics for Informatics”. In Course of Electrical and Electronic Engineering, Department of Electronics and Information Engineering, School of Engineering, (2) handling inter course

subjects and special subjects, as with (3) extra subjects in the graduate school, inter-department subjects, and inter-school subjects. In addition to education and research, (4) university's operations management will partly be assigned.

5. Qualifications

- (1) A doctoral degree holder with a strong research track-record (including publications in high-impact international journals and top conferences) in one of the above fields
- (2) Ability to handle university's operation management and student supervision smoothly
- (3) Strong motivation for joint research and interaction with foreign researchers
- (4) Ability of communication and writing in English for high-level education and research

6. Desired Start Date

September 1, 2025 or later

7. Employment status

Full-time (Tenured)

8. Probation Period

The probation period is three months.

9. Salary

The salary will be determined in accordance with the regulations of Hokkaido University.

10. Working Form

Discretionary labor system for professional work based on the employee's agreement (*) or Fixed working hours system.

*The working hours for a day is deemed as 7 hours and 45 minutes.

11. Health Insurance

The Ministry of Education, Culture, Sports, Science and Technology Mutual Aid Association, Employees' Pension, Workers' Accident Compensation Insurance and

Employment Insurance

12. Name of Recruiting Institution

Hokkaido University

13. Measures to Prevent Second-hand Smoke

No smoking on campus except for the designated outside smoking areas

14. Application Materials

(1) CV with recent photo, including contact details (address, phone, and e-mail), academic record, job experience, and international society activity, ORCID (if possible).

* Applicant who has been employed by Hokkaido University from April 1, 2013 (any position, including Part-time Lecture, TA, TF, RA and Short-term Support Assistant, etc.) should provide full details of your employment history.

(2) List of publications (including reviewed journal articles, keynote/invited talks, reviewed conference papers, book, survey articles, awards, patents, grants, listed from recent); Please indicate the impact factor (IF) and the number of citations for each reviewed article, if available.

(3) Copies of 3 selected publications.

(4) Summary of past and current researches (approximately 1,000 words). International joint research activities should be described if they exist.

(5) Summary of the past teaching activities within 500 words (in English).

(6) Future research plan within 500 words (in English).

(7) Future teaching plan within 500 words (in English)

(8) A list of two references and their contact details.* Free format with an attached photo taken within six months, date and year of birth, academic history, degree, qualifications, record of awards, employment history, research history, teaching experience, affiliated academic society, activities in academic society, ORCID (if possible).

*Printed documents of (1)-(8) above and their electronic files (source files or scanned files) stored in CD, DVD or USB memory must be submitted upon application by postal mail.

15. Selection

Applicants who passed the first document-based screening will be interviewed.

16. Application Deadline

Monday, May 19, 2025 (JST)

*The deadline must be strictly observed.

17. Application

(1) Application materials must be submitted by registered mail with “Application for the faculty position in the Research Area of Advanced Nanomaterial, Research Center for Integrated Quantum Electronics, [06-116](#)” in red ink on the surface of the envelope.

Administrative Affairs, Faculty of Information Science and Technology, Hokkaido University

Kita 14 Nishi 9, Kita-ku, Sapporo Hokkaido 060-0814 Japan

(2) Via upload link of JREC-IN Portal(<https://jrecin.jst.go.jp/seek/SeekTop>). A set of application materials in pdf format must be uploaded.

*The documents once submitted will not be returned. Personal information will be exclusively used for the screening Administrative Affairs, Faculty of Information Science and Technology, Hokkaido University

18. Inquiries

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19. Others

Upon the interview, transportation and related expenses will not be paid.

At Hokkaido University, we are actively promoting both education and research activities while relying on diverse human resources and gender equality. Therefore, we explicitly invite women qualified in research field to apply. We are also actively supporting a satisfying work-life-balance and are thus creating ideal environments for people to reach their full potentials.