

**Assistant Professor (Fixed-term contract)**  
**(Akine & MacLachlan Lab, Nano Life Science Institute, Kanazawa University)**

[Institution] Kanazawa University

[URL of institution or department] <https://nanolsi.kanazawa-u.ac.jp/en/>

[Department] Nano Life Science Institute (NanoLSI)

[Institution type] National university

[Content of job information]

Nano Life Science Institute (WPI-NanoLSI) at Kanazawa University was launched in October 2017, with support of the World Premier International Research Center Initiative (WPI) program by MEXT, Japan. At NanoLSI, we combine the world's most advanced technologies in bio-scanning probe microscopy (SPM) and supramolecular chemistry to develop novel nanoprobe techniques that allow us to directly image, analyze, and manipulate nanodynamics of proteins, metabolites, and nucleic acids both on the surface of and inside the cell. In addition, through the use of innovative nanoprobe techniques combined with other advanced analytical methods, we aim to achieve fundamental understanding of the nano-level mechanisms underlying basic cellular functions (e.g., cell differentiation/proliferation, stemness, signal transduction, genome dynamics, etc.) and their cancer-specific abnormalities. To this end, we will perform detailed comparisons between nanodynamics inside normal and cancer cells. Based on the developed technologies and knowledge acquired through such research works, we will establish a new research field termed "nanoprobe life science," which aims to achieve nano-level understandings of various life phenomena including cancer using advanced nanoprobe technologies.

We are looking for an Assistant Professor to perform the following research work as a staff member who plays a central role in the area of sensor and probe development. The Assistant Professor will work in the area of synthetic chemistry, designing and synthesizing new molecular and supramolecular substances that can be integrated into new probes as part of the WPI program.

[Open Position] Assistant Professor (Fixed-term contract)

[Main Duties] At Nano Life Science Institute, the Assistant Professor plays a central role in promoting integrated research in the fields of the supramolecular chemistry and life science disciplines.

- ① Synthesis of new host molecules for bioactive organic compounds
- ② Development of new sensing techniques for organic compounds in biological samples

### ③Design and synthesis of new molecular machines for manipulating biomolecules

The Assistant Professor is supposed to promote basic research with Prof. Akine, and also with Prof. Mark MacLachlan.

[http://chem.s.kanazawa-u.ac.jp/coord/index\\_e.html](http://chem.s.kanazawa-u.ac.jp/coord/index_e.html)

<https://www.chem.ubc.ca/mark-maclachlan>

Dr. MacLachlan is a Professor of the University of British Columbia, and one of the PIs of NanoLSI. Prof. MacLachlan visits KU for a total of 30 days in each year to collaborate with other PIs of NanoLSI. NanoLSI expects applicants to play a significant role as an Assistant Professor in a "joint lab" of Prof. Akine & Prof. MacLachlan.

[Address of work location and other information]

Nano Life Science Institute, Kanazawa University,  
Kakuma-machi, Kanazawa, Ishikawa 920-1192, Japan

[Number of Position] One

[Starting date] October 1, 2024 or as early as possible if later. (negotiable)

[Research field] Area: Chemistry

Discipline: Supramolecular chemistry, organic chemistry

[Job type] Assistant Professor level

[Employment status] Full-time (Nontenured)

[Qualifications]

Applicants must satisfy all of the following qualifications.

- 1) Ability to conduct research activities in English
- 2) Possess adequate communication skills, knowledge of research presentations, and ability to write research papers
- 3) Ability to conduct research activities effectively both independently and in a team
- 4) Doctoral degree (including equivalent degrees such as a PhD from overseas universities) has been conferred or will be conferred when he/she arrives at the post.
- 5) Research experience with any one of the following: Organic Chemistry, Biofunctional Chemistry, Supramolecular Chemistry, Coordination Chemistry, or Polymer Chemistry

Compensation [Details of salary, working hours, holiday, period of employment and insurance, accommodation, etc.]

[Position]

Assistant Professor (Fixed-term contract)

[Period of employment]

From October 1, 2024 or as early as possible if later until March 31, 2027

Note; Negotiation is possible on employment start date.

[Start-up research funds]

We will provide one million yen in the first year for research funding.

[Working Hours]

Working hours are determined according to the Discretionary Labor System for Professional Work (7 hours and 45 minutes per day)

[Salary]

Basic pay, 4,200,000 yen (Annualization conversion)

Special allowance, around 1,320,000 yen (Annualization conversion)

Salary will be fluctuated by performance and evaluation after adoption.

[Other]

Social Insurance: Mext Mutual Aid Association

Eligibility to Unemployment Insurance: Yes

Work Condition Details: According to the rules of Kanazawa University. (in Japanese)

URL: <https://www.kanazawa-u.ac.jp/university/administration/regulation/rules>

[Application period]

August 31, 2024 Deadline for receipt (Evaluation will be performed upon receipt of each application and, if an appropriate candidate is found, this call may be closed in about a month after the offering has started ).

Application/selection/notification of result/contact details

[Application Documents]

- 1) Curriculum vitae with a recent photograph of the face, describing present address, phone number, e-mail address, academic career, research career, professional career, and other relevant information.
- 2) List of research activities, including original scientific papers, book chapters, other publications, presentations in scientific meetings, awards, and other relevant activities.
- 3) Offprints of main published papers (Maximum number of papers is five, and hard copies are accepted.)

- 4) List of research support (Time period, name of grant, title of education/research, and amount of money should be included.)
- 5) Outline of past research and teaching (one sheet in free format)
- 6) A description of the applicant's research interests, achievements, and future research plan (one sheet in free format)
- 7) Name, affiliation, and contact details of two referees

➤ Please send the application form by e-mail.

Email : [nanolsi-jobs@adm.kanazawa-u.ac.jp](mailto:nanolsi-jobs@adm.kanazawa-u.ac.jp)

➤ As we cannot receive emails larger than 5 MB, please use an upload site if the size of your email exceeds 5 MB. Please write "Application for Faculty Position (Prof. Akine & MacLachlan)" in the title of the e-mail.

[Selection process (selection method and hiring decision), notification of result]

Applicant screening and interview

\* We do not cover the transportation expenses associated with the interview.

[Contact Information]

Nano Life Science Institute, Kanazawa University (WPI-NanoLSI)

Dr. Shigehisa Akine (Professor, NanoLSI)

Email: [akine@se.kanazawa-u.ac.jp](mailto:akine@se.kanazawa-u.ac.jp)

If you have any questions regarding employment regulations or administrative procedures, please contact the following address.

Nano Life Science Institute, Kanazawa University

Tel: +81-76-234-4550

Email: [nanolsi-jobs@adm.kanazawa-u.ac.jp](mailto:nanolsi-jobs@adm.kanazawa-u.ac.jp)

[Additional information]

1) The website below gives information about employment regulation.

<https://nanolsi.kanazawa-u.ac.jp/en/staff/rules/>

2) Kanazawa University actively promotes a gender equality in the workplace. For details, see the following URL: <https://cdl.w3.kanazawa-u.ac.jp/en/>

3) At NanoLSI, many female researchers are actively working on research activities. For details, see the following URL: <https://nanolsi.kanazawa-u.ac.jp/en/research/diversity/>