14th Bio-SPM Summer School Application Guidelines

Overview

The research teams at Kanazawa University have been pioneering the development of original Bio-SPM technologies, including Atomic Resolution/3D-AFM (FM-AFM), High- speed AFM, SICM（Scanning Ion Conductance Microscope), and AFM for Cell Measurement, and have applied them to life science research.

The Nano Life Science Institute (WPI-NanoLSI), Kanazawa University, will hold the *Bio-SPM Summer School* and invite young researchers and students who are interested in Bio-SPM technologies. In this school, participants will have the opportunity to use our Bio-SPM technologies to image their own samples and explore their potential.

Participants can choose **one** technology from among Atomic Resolution/3D-AFM, High-speed AFM, SICM, and AFM for Cell Measurement, according to their purpose. Please note that applicants may be assigned to a different technology from their first choice depending on the suitability of their samples. For more information about Bio-SPM technologies, please refer to the "**Overview of Each Bio-SPM Technology**" document on the 14th Bio-SPM Summer School website (https://nanolsi.kanazawa-u.ac.jp/research/applications/summerschool/).

Samples suitable for Bio-SPM observation include biomolecules, cells, as well as a wide range of other samples for which observation in solution is desirable.

The NanoLSI faculty members will serve as instructors and will teach not only how to use the Bio-SPM instruments but also how to prepare sample for Bio-SPM. Observation of participants' own samples will be carried out as collaborative research with our instructors.

Application Eligibility

- Young researchers and students, who are interested in observing their own samples using Bio-SPM. Prior knowledge of Bio-SPM is not required.
- Applicants must be able to prepare and bring their own samples and participate in the full schedule of the Bio-SPM Summer School from August 17 to 21, 2026.
- Applicants must have no issues presenting their results at the Results Presentation Meeting on Friday, August 21, 2026. (Participants in the meeting must sign a Non-Disclosure Agreement.)
- Those who participated in the previous Bio-AFM/SPM Summer School are no longer eligible. Such individuals are encouraged to apply for the Bio-SPM Collaborative Research program instead. Applicants belonging to the same laboratories as previous participants are eligible.
- For each research theme, only one applicant will be accepted.
- Students must obtain permission from their affiliated organization to participate after being selected.

Schedule
Aug 17(Mon) – Aug 21(Fri), 2026
Nano Life Science Institute (WPI-NanoLSI), Kanazawa University, Kakuma Campus
All the participants will gather at NanoLSI on August 17 and follow the schedule below.

- **Day 1 (August 17) AM**: Lectures and self-introduction session
- **Day 1 PM–Day 4 (August 20)**: Participants will be assigned to SPM rooms designated by the instructors and will conduct Bio-SPM experiments.
- **Day 5 (August 21):** Results Presentation Meeting (Language: English)
- Learning materials on SPM will be provided in advance, and participants are requested to review them beforehand.
- All programs will be conducted in English.

Application deadline
Applications must reach us by Friday, May 15, 2026

How to apply

- Please submit your application to Bio-SPM Summer School Office: nanoss_recp2026[at]ml.kanazawa-u.ac.jp (*Please replace [at] with @.*)
- Download the application form from the 14th Bio-SPM Summer School website.(https://nanolsi.kanazawa-u.ac.jp/research/applications/summerschool/).
- If you do not receive an acceptance email within three days after submitting your application, please contact us at the above address. In such case, please email us from a different email address than the one you used for your application.

Instructions for Completing the Application Form

- Please describe the samples or phenomena you wish to observe during the Bio-SPM Summer School, as well as the necessity and significance of SPM observation in your research. You may write in Japanese or English. Ensure that your description fits within the designated space.
- Figures and tables may be included.
- Please provide as much detail as possible - for example, purity and other relevant characteristics in case your sample is a protein.
- The following samples cannot be accepted:
    - Genetically modified organisms requiring P2 level or higher containment, pathogenic microorganisms and viruses requiring BSL-2 or higher, and other regulated materials.
    - For overseas applications, any materials prohibited from being brought into Japan.
    - Items requiring a permit application for use.

- If it is determined after the selection, that a participant's sample cannot be brought to the summer school, the selection may be revoked.

Inquiry

Bio-SPM Summer School Office:
nanoss_recp2026[at]ml.kanazawa-u.ac.jp (*Please replace [at] with @.*)

Quota

- Approximately 20 participants
- Applications will be reviewed, and participants will be selected.

Fee

- Participation fee: Free of charge
- Transportation to Kanazawa University and accommodation during your stay in Kanazawa will be covered in accordance with Kanazawa University regulations.
- The maximum reimbursement amount is 200,000 JPY.
  However, if you live overseas and your airfare is expected to exceed this limit, please consult with us after your acceptance. (*Please note that reimbursement may take up to three months after the summer school*)
- You are responsible for the shipping costs of the samples you bring, as well as for food and miscellaneous daily expenses during your stay.
- Accommodation will be arranged by Kanazawa University.

Publication of the results

If the results obtained in the Bio-SPM Summer School are expected to be included in a manuscript or other publication, please consult with NanoLSI instructor(s) before submission, as is generally the case for collaborative research.