Postdoctoral Research Position

Sumino Laboratory, Department of Applied Physics,
Tokyo University of Science
November 25th 2026

1. Background and Project Overview

Sumino Laboratory (Artificial Life Physics Laboratory; Professor Yutaka Sumino and Assistant Professor Kiwamu Yoshii), Department of Applied Physics, Faculty of Advanced Engineering, Tokyo University of Science, invites applications for a postdoctoral research position.

Our laboratory participates in Project B03, “Quantum-Inspired Active Matter and Functional Design” (Principal Investigator: Akira Kakugo), within the Grant-in-Aid for Transformative Research Areas (A) program “Dynamic Materials Science” (FY2026–2030). We aim to create topological active matter using artificial components such as micrometer-sized particles and to explore the functions that emerge from these systems.

We seek a candidate who can conduct experimental research. An interest in collaborative research involving numerical simulations and theoretical approaches would also be welcome.

Experience with optical tweezers, magnetic tweezers, or microfluidic devices is desirable. Applicants without prior experience are also welcome, provided they are motivated to learn these techniques and pursue research proactively.

For further information, please visit:

- Sumino Laboratory
- “Dynamic Materials Science,” Transformative Research Areas (A)

2. Research Responsibilities and Fields

Research responsibilities

The successful applicant will conduct research on the design and fabrication of self-propelled microparticles driven by electric/magnetic fields or chemical reactions, as well as the control of their collective motion. A particular focus will be on engineering collective dynamics through the design of topology in wavevector space.

Research fields

Biophysics, chemical physics, and soft matter physics.

3. Affiliation and Work Location

Affiliation

Sumino Laboratory (Artificial Life Physics Laboratory; an existing research group)

Department of Applied Physics, Faculty of Advanced Engineering

Tokyo University of Science

Work location

Katsushika Campus, Tokyo University of Science

6-3-1 Niijuku, Katsushika-ku, Tokyo 125-8585, Japan

4. Eligibility

Applicants must:

- Hold a doctoral degree or expect to obtain one by the start date of the appointment.
- In principle, have held their doctoral degree for less than seven years as of the appointment date.

5. Employment Status, Start Date, and Contract Period

Position: Postdoctoral Researcher

Employment status: Full-time, fixed-term contract employee

Expected start date: April 1, 2027. The start date is flexible and may be discussed according to the successful applicant’s circumstances.

Contract period: The planned employment period is from April 1, 2027, through March 31, 2031.

Contracts may be renewed annually based on work performance, research progress, budget availability, and other relevant factors. Employment shall end no later than March 31, 2031, and the total period of employment shall not exceed four years.

Probationary period: Two months from the date of appointment. However, the University may shorten or waive this period if it deems it particularly necessary.

6. Salary and Benefits

Salary: JPY 362,000 per month (approximate annual salary of JPY 4 million or more)

Salary increases: None

Bonuses: None

Retirement allowance: None

Commuting allowance: Provided, up to a maximum of JPY 55,000 per month.

Insurance coverage:

- Health insurance and employees' pension insurance through the Private School Mutual Aid System
- Workers' accident compensation insurance and employment insurance

7. Working Hours and Holidays

Working hours:

- Weekdays: 8:30 a.m.–5:00 p.m.
- Break: 12:45 p.m.–1:45 p.m.
- Saturdays: 9:30 a.m.–12:00 noon

Holidays:

Sundays, national holidays, University Anniversary Day (May 4), Tokyo Butsurigakuen Anniversary Day (June 14), and the year-end and New Year holidays (December 29 through January 3).

Employees may be required to work on these holidays to accommodate the academic calendar or other university needs.

8. Application Materials and Submission

Please combine the following items (1)–(4) into a single PDF file and email it to the contact address below.

1. Curriculum vitae, including contact information.
2. List of research achievements, including publications, presentations at international conferences, research funding received, and other relevant achievements.
3. One-page summary of your previous research and future research plans.
4. Name, affiliation, and email address of a person who can comment on your qualifications and research.

When preparing item (3), please refer to the laboratory website and the "Dynamic Materials Science" program website.

We may contact the person listed in item (4) at a later date for a reference.

Application materials will be used solely for the selection process. If you do not receive an acknowledgment of receipt within a few days, please contact us.

9. Selection Process

Selection will be based on a comprehensive evaluation of the application materials. Applicants may also be invited for an interview. Interviews will be conducted on a rolling basis starting December 20.

Applicants residing far away will be asked to attend an online interview. Applicants are responsible for any travel and other expenses associated with attending an interview.

10. Smoking Policy

Smoking is prohibited except in designated areas.

11. Contact and Inquiries

Professor Yutaka Sumino
Department of Applied Physics, Faculty of Advanced Engineering
Tokyo University of Science
Phone: +81-3-5876-1393
Email: ysumino@rs.tus.ac.jp