

Tenure-Track Faculty Positions at the Institute of Fluid Science, Tohoku University

Summary

Position	Assistant / Associate Professor
Number of Positions	2
Job type	Tenure-track, 9-year term
Location	Institute of Fluid Science, Tohoku University Sendai, Miyagi, Japan
Qualifications	• Doctoral degree upon taking up the post • Demonstrated record of research accomplishments • Ability to communicate effectively and conduct research in English
Submission	Application Form: https://jotform.com/262701044533044
Application Deadline	February 12, 2027 17:00 JST
Starting Date	August 1, 2027, or as soon as possible thereafter

For questions contact: ifs-jin@grp.tohoku.ac.jp

About the Position

Since its establishment in 1943, the [Institute of Fluid Science \(IFS\)](#) at Tohoku University has been a leader in advancing fundamental fluid dynamics and its practical applications. Today, our core philosophy is Integrated Flow Science, a framework that transcends specific temporal or spatial scales to treat fluid science as a universal foundation for diverse physical phenomena. Centered on four core research clusters—Aerospace, Nano-Micro, Environment & Energy, and Health, Welfare & Medical Care—we broadly integrate flow phenomena ranging from the macro to the micro and nano scales with fields such as materials & devices, AI & data science, and advanced computational and measurement technologies. Through this integration, we are working to deepen the foundations of fluid science, pioneer new academic and research domains, and solve increasingly complex societal challenges.

Fluid science is rapidly evolving beyond traditional engineering and scientific boundaries into a foundational discipline critical to solving pressing global challenges. Key initiatives like carbon neutrality, healthy aging, resilient societies, and space exploration are all deeply connected to fluid phenomena. Yet, many fundamental questions remain unanswered, from turbulence and interfacial phenomena to non-equilibrium states and the unified description of molecules and continua. Furthermore, the integration of fluid science with AI, autonomous systems, quantum technology, and the life sciences is continuously generating unprecedented research opportunities. In this context, IFS is committed to deepening the academic foundations of fluid science while serving as a global research hub that unites diverse talent, knowledge, and resources across disciplines and borders.

Following Tohoku University's accreditation as [Japan's first University for International Research Excellence](#), the Institute is opening a broad call for tenure-track faculty across all fields related to fluid science. We are seeking early- and mid-career researchers capable of driving our mission forward. This call is not limited to traditional disciplines; we welcome applications encompassing everything from fundamental explorations of flow phenomena, to interdisciplinary research that opens new frontiers, to applied research aimed at solving major societal challenges.

The successful candidate will lead their own research group as an independent Principal Investigator (PI), driving bold and original research based on their unique expertise and vision. We are particularly interested in researchers who seek to uncover unexplained phenomena, establish new scientific paradigms, or create entirely new branches of fluid science through cutting-edge interdisciplinary fusion. We also welcome those who approach societal challenges as new research opportunities, actively translating their discoveries into real-world solutions while collaborating globally. Above all, we expect candidates to go beyond extending existing fields. We are looking for visionaries who will carve out new research directions and emerge as international leaders.

Upon appointment, researchers will be fully supported in collaborating flexibly across the [Institute's various divisions, affiliated centers, and research clusters](#), while maintaining their independence. IFS provides access to [world-class facilities](#), including low-turbulence wind tunnels, shock wave facilities, and advanced supercomputers. We also actively facilitate joint research and personnel exchanges through our extensive global network. To ensure a successful start, new faculty will be paired with internal mentors who will help them establish their research groups and foster interdisciplinary connections. We invite applications from highly motivated, ambitious researchers ready to leverage this world-class environment to push the boundaries of fluid science and lead global efforts to solve societal challenges.

Research Field

Broadly encompasses fields related to fluid science. This includes not only fundamental research on flow phenomena, but also interdisciplinary research expected to pioneer new fields through integration with fluid science, as well as research aimed at resolving societal challenges and driving social implementation.

Term of Employment

The initial appointment is for a term of 9 years. In accordance with the Institute's tenure-track system, a comprehensive tenure review will be conducted no later than two years prior to the end of the term. Applicants will be notified of the review results at least two years before their contract expires.

Successful candidates will be granted tenure and promoted to either a tenured Associate Professor or a full Professor with an indefinite term of employment.

Qualifications

- Ph.D. at the time of appointment.
- Outstanding research record in their area of expertise.
- Adequate English proficiency to conduct research activities in English

Compensation & Benefits

Annual Salary

The salary for this position will be determined in line with Tohoku University regulations, reflecting experience and performance of the candidate.

Social Insurance

- Health insurance via the MEXT Mutual Aid Association
- Pension insurance
- Employment insurance
- Worker's accident compensation insurance

Work Schedule

Flexible work schedule under the Discretionary Labor System for Professional Work. The standard workday is 7.75 hours, with the actual hours worked left to the discretion of the employee. Breaks are provided in line with Japanese labor regulations.

Research Funding

To ensure a smooth transition, the successful candidate will receive a startup package of 2.5 million JPY in the first year of the appointment to establish their research foundation. Additionally, an annual basic research grant of 2 million JPY and an annual travel allowance of 2 million JPY will be provided every year up through the seventh year of employment.

The appointed researcher will also have full access to the state-of-the-art facilities and equipment at the Institute, as well as the shared research facilities across Tohoku University.

How to Apply

Please submit the following documents via the dedicated form linked below. All documents must be submitted as PDF files in A4 or US Letter size. Please upload items 1 through 6 as separate files.

Application Form: <https://jotform.com/262701044533044>

Submission Documents

1. Curriculum Vitae

Include educational background, employment history, degrees earned, awards, and contact information

2. List of Publications

Begin with a summary of your research output, followed by a categorized list of publications (e.g., original peer-reviewed papers, peer-reviewed conference proceedings, books, and review articles). For co-authored works, list all authors and underline your name.

The summary must include your total count for each category, total citations, your h-index, and all verifiable research database IDs available (e.g., Scopus, ORCID, Web of Science). You may also highlight particularly notable achievements here.

3. Other Research & Academic Activities

List awards/honors, patents, domestic and international conference

presentations, competitive research grants awarded, community outreach, and any other notable academic activities not covered in item 2.

4. Copies of Major Publications

PDF copies of up to five major papers that best represent your research.

5. Summary of Past Research

Describe the background, major achievements, and academic significance of your past research.

6. Research Plan & Aspirations

Outline your research vision and goals and explain how you plan to develop your research at the Institute of Fluid Science.

Notes:

- Application documents may be written in either English or Japanese.
- The following information will need to be provided directly in the application form:
 - Basic information (name, contact information, current affiliation)
 - Researcher ID (Scopus Author ID, ORCID iD, and/or Web of Science ResearcherID)
 - Research metrics information (number of peer-reviewed publications, total citations, and h-index)
 - Contact information for 1 to 3 references (name, affiliation, title, email address, and relationship to the applicant)
- Submitted documents will be used strictly for selection purposes only.
- Candidates may be asked to submit additional materials during the selection process.

Selection Process

The selection process consists of two stages: a document screening followed by an interview.

Contact Information

General Affairs Section, Institute of Fluid Science, Tohoku University

Email: ifs-jin@grp.tohoku.ac.jp

Additional Information

- Tohoku University's International Support Center (ISC) offers comprehensive assistance to researchers, enabling them to concentrate on their academic work without the usual concerns of relocating to a foreign country. The center provides extensive support services, handling everything from travel coordination and housing arrangements to administrative paperwork, banking setup, and various other necessities. [ISC website](#)
- Tohoku University actively fosters Diversity, Equity and Inclusion initiatives, welcoming applications from talented individuals across all backgrounds and demographics. For more information about their commitment to these principles, interested candidates can visit the university's DEI Declaration webpage, which outlines their official stance on Diversity, Equity and Inclusion. [Tohoku University Declaration of Diversity, Equity and Inclusion \(DEI\)](#)
- In accordance with Article 8 of the Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment, Tohoku University shall, as a measure for increasing the presence of women among the academic staff, prioritize the hiring of women deemed qualified for each job opening, based on impartial evaluation.
- Tohoku University has released 'Tohoku University - Live as Who You Are - Guidelines for Gender and Sexual Diversity,' which offers guidance on respectful approaches to diverse sexualities within the university community. These guidelines aim to foster an inclusive environment where all members - students, faculty, and staff alike - honor sexual diversity throughout their academic, research, and professional endeavors. Additional information is available on the university's Center for Diversity, Equity, and Inclusion website. [Tohoku University -Live as Who You Are- Guidelines for Gender and Sexual Diversity](#)

- Tohoku University maintains the most extensive on-campus childcare infrastructure among all Japanese national universities. The system features three childcare facilities: Kawauchi Keyaki Nursery School (accommodating 22 children) and Aobayama Midori Nursery School (with space for 116 children), both serving all university staff, alongside Hoshinoko Nursery School (capacity of 120), specifically designated for Tohoku University Hospital employees. Additionally, the university hospital operates a specialized childcare facility for children who are mildly ill or recovering, which is accessible to all university personnel.
- For comprehensive details about Tohoku University's initiatives supporting work-life balance, researcher assistance programs, and gender equality efforts--including specific measures encouraging male employees to take childcare leave--please consult the university's dedicated website.
[Center for Diversity, Equity and Inclusion web page](#)
[Human Resources and Planning Department website \(in Japanese\)](#)
- Tohoku University offers dedicated support to help the spouses of appointed faculty members explore employment opportunities-both academic and non-academic-with the university. For details, please contact the recruiting department.