

April 15, 2025

Recruitment for Professor Position

Institute of Fluid Science (IFS), Tohoku University extended the application period for the open call for an assistant professor position issued on March 6, 2025.

Preference will be given to highly motivated candidates with an outstanding academic background.

Kaoru Maruta
Director
IFS, Tohoku University

1. Division, Laboratory, Number of Positions and Job Title

Division	Number of Positions and Job Title
The Global Collaborative Research and Education Center for Integrated Flow Science (IFS-GCORE)	One or two positions for tenured full Professor, fixed-term Associate Professor, or fixed-term Assistant Professor

2. Job Description

Research, education, and international collaboration in the fields of Integrated Flow Science to contribute to the global supply chain of fuel ammonia.

3. Required Qualifications and Conditions

Candidates must have a doctoral degree and a distinguished achievement in the above-mentioned field of specialization.

4. Starting Date and Conditions of Employment

On or after June 1, 2025, at the earliest possible date

Professor (Permanent employment [Retirement age depends on the rules and regulations of Tohoku University.])

Associate (Term: Ten years) and Assistant Professors (Term: Eight years without the possibility of renewal or with the possibility of renewal for one additional two-year term); evaluation will be conducted to promote to a full/associate professor in/before the final year of the term.

5. Application Deadline

Application documents must arrive by Friday, May 23, 2025, at 17:00 (JST).

6. Requested Documents

I. Curriculum Vitae

Postal address and email address should be included.

II. List of research accomplishments*

- 1: Peer-reviewed journal papers (Specify the latest impact factor of the journals.)
- 2: Review papers (Specify the latest impact factor of the journals.)
- 3: Peer-reviewed full-length proceedings papers
- 4: Books, chapters
- 5: Invited lectures (only lectures presented by the applicant)
- 6: Presentations at international conferences other than Item 5
- 7: Experience in organizing conferences
- 8: Patent applications/registrations
- 9: Background and achievements in international research collaboration
- 10: Awards and honors
- 11: Research fundings
- 12: Others if applicable

*A summary of the number of publications and achievements for each of (1) through (11) should be attached before (1). The total number of citations for items (1) through (3) and h-index should be included in the summary. Lists should include the twelve items shown above. All the coauthors for Items 1 through 6 and 8 in II should be specified. Underline the applicant for Items 1 through 6, and 8. In addition, the roles of the applicant for Items 1 through 8 in II should be described. The number of citations for each publication should be indicated with the source of them. Summarize Items 1 through 12 in a single PDF file.

III. Electronic files in PDF format of five selected papers.

IV. Summaries of the five selected papers around 300 words each.

V. Future research and education plan at IFS. Include educational experiences in subjects related to mechanical engineering.

VI. Contact information of reference(s) up to three persons: name, affiliation, title, postal address, phone number and email address.

Documents should be prepared in A4 format. Put all the files onto the USB flash drive or equivalent and send it by the registered mail if postal service is used.

Submission by file transfer service or email attachment is also acceptable. Indicate “Application for Professor Position of IFS-GCORE” in the subject of email. An acknowledgment of receipt will be sent to the applicant. If the applicant does not receive it within 48 hours from submission, contact again. The applicant may be requested to provide additional documents during the screening process. An online interview may be conducted.

7. Contact

Director Kaoru Maruta

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For more information on the Institute of Fluid Science, visit:

<https://www.ifs.tohoku.ac.jp/>

Expected research areas and additional information

The Global Collaborative Research and Education Center for Integrated Flow Science (IFS-GCORE) will conduct research on the academic foundation of integrated flow science for its deployment in diverse application fields, including fuel ammonia and green nanotechnology. The center will promote international joint research and education with overseas centers in France, Singapore, Taiwan, Saudi Arabia, and the U.S., and aim to become an alliance-type international base that creates social impact. Also, as cooperative courses of the Mechanical Engineering course of the Graduate School of Engineering, Department of Mechanical and Aerospace Engineering of the School of Engineering at Tohoku University, faculty members are in charge of lectures related to mechanical engineering.

Through this recruitment, we are planning to promote the following research.

Division	Research contents
The Global Collaborative Research and Education Center for Integrated Flow Science (IFS-GCORE) *	Research, education, and international collaboration in the fields of Integrated Flow Science to contribute to the development of the global supply chain of fuel ammonia including fuel production, safe storage, transportation, material, and combustion engineering.

* Global Collaborative Research and Education Center for Integrated Flow Science (IFS-GCORE) consists of twelve laboratories: Green Nanotechnology Laboratory, High Speed Reacting Flow Laboratory, Energy Resources Geomechanics, Laboratory, Energy Dynamics Laboratory, Multiphase Flow Energy Laboratory, Multi-Physics Design Laboratory, Reactive Flow Systems Laboratory, Mechanical Systems Evaluation Laboratory, Advanced Materials and Fluids Design Laboratory, Flow Dynamics Laboratory, Novel Battery Nanoscale Flow Concurrent Laboratory, Integrated Flow Science, and Technology Laboratory, Advanced Integrated Flow Science Laboratory. At the time of appointment, a new laboratory will be established.

- Tohoku University promotes activities to increase Diversity, Equity and Inclusion (DEI) and encourages people of varied talents from all backgrounds to apply for positions at the university.

Tohoku University's website about the DEI Declaration is here:

<https://dei.tohoku.ac.jp/vision/about/>

- Pursuant to 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 published 'Tohoku University-Live as Who You Are-Guidelines for Gender and Sexual Diversity' to provide explanations and details of how those at the university should respond with respect to diverse sexuality. The purpose of the guidelines is to create an environment in which all students, faculty, and staff respect diverse sexuality in their academic, research, and professional activities.

Please see the Tohoku University Center for Gender Equality Promotion website:

https://dei.tohoku.ac.jp/wp-content/uploads/2023/10/EN_GuideLine.pdf

- Tohoku University has the largest on-campus childcare system of all Japanese national universities. This network comprises three nurseries: Kawauchi Keyaki Nursery school (capacity: 22) and Aobayama Midori Nursery school (116), both open to all university employees, as well as Hoshinoko Nursery school (120), which is open to employees working at Tohoku University Hospital. In addition, Tohoku University Hospital runs a childcare room for mildly ill and convalescent children which is available to all university employees
- See the following website for information on these and other programs that Tohoku University runs to assist work-life balance, to support researchers, and to advance gender equality, including measures to promote childcare leave among male employees.

Center for Diversity, Equity, and Inclusion, Tohoku University Website:

https://dei.tohoku.ac.jp/vision/consulting/for_family/

Human Resources and Planning Department website:

<https://c.bureau.tohoku.ac.jp/jinji-top/external/a-4-kosodate/>