

September 12, 2024

Recruitment for Associate Professor Position

Institute of Fluid Science (IFS), Tohoku University invites applications for an Associate Professor position. Preference will be given to highly motivated candidates, with an outstanding academic background.

Kaoru Maruta
Director
Institute of Fluid Science, Tohoku University

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

Division	Laboratory	Number of Positions and Job Title
Global Collaborative Research and Education Center for Integrated Flow Science (IFS-GCORE)	Energy Resources Geomechanics Laboratory	One position open for Associate Professor

2. Job Description

We aim to solve global environmental issues and energy problems. We also promote research and education on the clarification, prediction, and control of fluid flow and geomechanical phenomena within the earth's crust, to make advanced use of the structure and energy resources within the earth's crust.

3. Required Qualifications and Conditions

Candidates must have a doctoral degree upon arrival at the post and a distinguished achievement in the above-mentioned specialized field. (See the notation of DEI attached)

4. Starting Date

April 1, 2025

(Term: Ten years without extension)

5. Application Deadline

Application documents must arrive by noon, Monday, December 2, 2024 (JST).

6. Requested Documents

I. Curriculum Vitae

Please be sure to include your current postal address and e-mail address.

II. List of research accomplishments*

- 1: Peer-reviewed journal papers (Specify the latest impact factor of the journals, as much as possible.)
- 2: Review papers (same as above)
- 3: Peer-reviewed full-length proceedings
- 4: Books, chapters
- 5: Invited lectures (international and domestic conferences) (only the lectures presented by the applicant)
- 6: Presentations at international conferences other than invited lectures (Indicate the presenter.)
- 7: Experience in organizing international/domestic conferences
- 8: Patent applications/registrations
- 9: Background in international/domestic research collaboration, and achievements of overseas research activities
- 10: Awards received
- 11: Competitive research funding obtained
- 12: Other

* All the above documents should be prepared on separate sheets. All the names of co-authors for No. 1-No. 6 in II above and all the names of joint inventors for No. 8 in II above should be specified, and the name of the applicant underlined. Also, the roles of the applicant for No.1-No. 8 in II above should be mentioned. The number of citations for No.1-No. 6 in II above should be written and should indicate the source of the number of citations. Summarize items 1 through 12 in a single PDF file.

III. Offprints of 5 papers of research achievements from No.1-No. 4 in II above. (Electronic files are acceptable.)

IV. Outline of your research achievements selected in III above (should be around 300 words each).

V. Statement describing the applicant's future research and education plan at IFS. (Please include past educational experiences in subjects related to mechanical engineering and describe them in concrete terms.)

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

Documents should be prepared in A4 format. Put all the files into USB flash drive or equivalent and send it by the registered mail if postal service is used. Submission by the transfer service and email attachment is also acceptable. Indicate “Application for Associate Professor of Energy Resources Geomechanics Laboratory Research Division” in the subject of email. An acknowledgment of receipt of the will be sent to the applicant. If the applicant does not receive 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, please 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 Division of Mechanical Engineering of the Graduate School at Tohoku University and the 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 (Laboratory)	Research Contents
Global Collaborative Research and Education Center for Integrated Flow Science (IFS- GCORE)* (Energy Resources Geomechanics Laboratory)	<p>We aim to solve global environmental issues and energy problems. We also promote research and education on the clarification, prediction, and control of fluid flow and geomechanical phenomena within the earth's crust, to make advanced use of the structure and energy resources within the earth's crust.</p> <ol style="list-style-type: none">1. Research on evaluation and prediction of crustal structure through the development of real-time monitoring methods.2. Research on the control of underground fluid flow.3. Development of energy resources in the earth's crust, such as methane hydrate and geothermal energy.4. Application of crustal utilization technology to environmental issues, such as carbon dioxide geological storage.

* 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, 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.

Notice

This recruitment is an English translation of the Japanese version. The content of the recruitment is based on the Japanese version.

Diversity, Equity and Inclusion (DEI)

- 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/>