

**Position Open: Specially Appointed Assistant Professor at Hokkaido University
Institute for Chemical Reaction Design and Discovery**

The Institute for Chemical Reaction Design and Discovery (ICReDD), Hokkaido University, as a global research center based on the "World Premier International Research Center Initiative (WPI)", supported by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), constructs an international research environment which gathers world-leading researchers and establishes a research environment that integrates computational, information and experimental sciences, in order to establish a new academic field "Chemical Reaction Design and Discovery", to provide substantial knowledge on chemical reactions that efficiently develop chemical reactions and materials for the future necessity, and to sustainably cultivate human resources engaged in the field of "Chemical Reaction Design and Discovery".

We are inviting applications for the position of Specially Appointed Assistant Professor (Takigawa group), Institute for Chemical Reaction Design and Discovery, Hokkaido University as follows.

1. Name of Recruiting Institution

National University Corporation Hokkaido University

2. Position

Specially Appointed Assistant Professor, 1 opening

3. Employment Term

1 year from the starting date

(Appointment may be renewed as every fiscal year in view of the circumstances (hiring expense etc.) and could be extended up to March 31, 2028 within the range of 10 years from one's starting date.)

4. Desired Starting Date

the earliest date after December 1, 2024 (negotiable)

5. Department

(Just after hiring) Institute for Chemical Reaction Design and Discovery

(Scope of change) No change expected.

6. Location

Sapporo, JAPAN (Hokkaido University)

7. Research Field

Computer Science (Machine Learning)

8. Job description

(Just after hiring) In the ICReDD Takigawa group, the following research will be carried out mainly to promote integrated research in computational, information and experimental sciences. Additionally, as a "Co-PI", the applicant will work closely with the PI to manage the group.

(1) Research on machine learning algorithms for chemistry and molecular science (especially geometric machine learning and dynamics prediction)

(2) Machine learning predictions and molecular representation learning from data obtained through quantum chemical calculations and chemical experiments.

(3) Design and discovery of molecules and chemical reactions using machine-learning-based exploration and model-based reinforcement learning.

(Scope of change) No change expected.

9. Qualifications

(1) PhD at the time of appointment

(2) Outstanding achievements and publications in the research field

(3) Strong motivation for research and other duties related to the management of the ICReDD

(4) Efficient communication skills in English for research activities

(5) Programming skills to implement advanced machine learning models.

(6) Ability to conduct research activities including research planning and paper writing, effectively both independently and in a team

10. Probation Period

The probation period is one month.

11. Salary

Annual Salary System

*The salary will be determined in accordance with the regulations of Hokkaido University.

12. Working Form

Discretionary labor system for professional work(*) based on the employee's agreement or Fixed working hours system

*The standard working hours for a day is deemed as 7 hours and 45 minutes.

**The leaves will be granted in accordance with the University's rules and regulations.

13. Health Insurance and Pension

The Ministry of Education, Culture, Sports, Science and Technology Mutual Aid Association Services including Health Insurance, Employee Pension, Workers' Accident Compensation Insurance and Employment Insurance

14. Measures to Prevent Second-hand Smoke

Smoking in designated areas only

15. Application Materials

(1) Curriculum Vitae

*Free format with an attached profile photo of the applicant, the following information should be included: Name, current address, telephone number and Email address, Date of Birth, academic history, degree(s), license, career history, awards, membership of organizations etc.

*Applicant who has been employed by Hokkaido University from April 1, 2013 (any position, including Part-time Lecturer, Teaching Assistant, Teaching Fellow, Research Assistant and Short-term Support Assistant, etc.) should provide full details of your employment history.

(2) List of research activities, including original scientific papers, book chapters, other publications, presentations in scientific meetings, awards, and other relevant activities.

(3) List of major publications (at most five)

* the following information should be included: summary, role, number of citations

(4) Summary of past and current research (One A4 page or less)

(5) Prospects and aspirations for future education and research at ICReDD (One A4 page or less)

(6) A list of two references (including the names, phone numbers and e-mail addresses)

*All the above application documents must be written in English.

16. Application Deadline

Recruitment ends as soon as the employee is decided.

17. Application Submission

Files including the documents above should be sent to the following e-mail address:

E-mail: recruit AT icredd.hokudai.ac.jp

*Change AT into @ when sending an e-mail.

*Please put "Application for Specially Appointed Assistant Professor in ICReDD (Takigawa group)" in the subject box.

*Personal information will be exclusively used for the screening.

18. Inquiries

Specially Appointed Prof. Ichigaku Takigawa

Institute for Chemical Reaction Design and Discovery (ICReDD), Hokkaido University

E-mail: takigawa AT icredd.hokudai.ac.jp

*Change AT into @ when sending an e-mail.

19. Others

• At Hokkaido University, we actively promote both education and research while fostering diverse human resources and gender-equality. Therefore, we explicitly invite women qualified in this research field to apply.

• As a measure to increase the percentage of female researchers at the University in accordance with Article 8 of the Act on Securing, Etc. of Equal Opportunity and Treatment between Men and Women in Employment, priority will be given to women if they are recognized as having the same competence required for the job based on a fair evaluation.

• The Office of Diversity, Equity, and Inclusion of Hokkaido University is working to promote a research environment in which diverse human resources can play an active role, focusing on human resource development for female researchers and support for balancing research activities and family life. For more information, please visit the Office of Diversity, Equity, and Inclusion website at the following URL. <https://www.dei.hokudai.ac.jp/en/>