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 (List 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

From the earliest possible date after October 1, 2023 (negotiable) to March 31st, 2024 (Renewal of appointment may be offered up to 10 years from the starting date or March 31st, 2028, which is earlier.)

4. Department

Institute for Chemical Reaction Design and Discovery

5. Location

Sapporo, JAPAN (Hokkaido University)

6. Research Field

Synthetic organic chemistry, asymmetric organocatalysis, quantum chemical calculation, machine learning

7. Job description

On the Joint research project "List Sustainable Digital Transformation Catalyst Collaboration Research Platform" (Please refer to "19. About List-PF"), the following research will be carried out mainly to promote integrated research in computational, information and experimental sciences.

- (1) Development of asymmetric reactions using highly confined organocatalysts
- (2) Development of asymmetric organocatalysis using quantum chemical calculation
- (3) Development of an optimization method for rapid asymmetric organocatalysis using an automated synthesizer or machine learning
- (4) Fusion research with applied research fields such as polymer chemistry

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

9. Probation Period

The probation period is one month.

10. Salary

Annual Salary System

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

11. Working Form

Discretionary labor system for professional work

- *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.

12. 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**

13. Measures to Prevent Second-hand Smoke

Smoking in designated areas only

14. 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 (Two A4 pages or less)
- (5) Prospects and aspirations for future education and research at ICReDD (Two A4 pages 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.

15. Application Deadline

Recruitment ends as soon as the employee is decided.

16. Application Submission

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

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

And cc to: list AT mpi-muelheim.mpg.de

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

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

*Personal information will be exclusively used for the screening.

17. Inquiries

Prof. LIST, Benjamin

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

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

And cc to: list AT mpi-muelheim.mpg.de

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

- · 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/

19. About "List Sustainable Digital Transformation (DX) Catalyst Collaboration Research Platform (List-PF)"

The Joint research project "List PF" was launched in April 2023 in the fields of organic chemistry and catalysis chemistry, which are the strengths of Hokkaido University, led by Specially Appointed Professor Benjamin List, the 2021 Nobel Laureate in Chemistry.

This List PF will dramatically advance the development of next-generation organocatalysts (sustainable DX catalysts) that consider environmental impact and SDGs by integrating DX technologies such as computational science, robotics, machine learning, and artificial intelligence, as well as expanding research in related fields as collaborative research.

Herewith it is expected to speed up the process from basic research to R&D and promote the global brain circulation by producing world-class, cutting-edge fusion research results in Hokkaido University's fields of strength, as well as contribute to the creation of innovation and the building of a sustainable society through the social implementation of research results.

Also Hokkaido University will establish leading position as a world-class research center for next-generation organocatalysts development by accelerating the development of next-generation organocatalysts (Sustainable DX Catalysts) that are environmentally friendly and SDGs-friendly through fusion, and by expanding and accelerating research in related fields as collaborative research.