
Job Vacancy Announcement

Research Associate/Junior Research Associate

The Earth System Division invites applications for the position of Research Associate or Junior Research Associate as detailed below.

1. Position

Contract Research Employees (Research Associate/Junior Research Associate), Earth System Division

2. Research Topic

Consideration of the specifications for a future greenhouse gas observation satellite

3. Description of Research

The National Institute for Environmental Studies (NIES) has been operating the Greenhouse gases Observing SATellite (GOSAT) series for over 15 years. Since the launch of the GOSAT satellite, remote sensing has been utilized as a powerful tool to understand the global and local behavior of greenhouse gases. We are preparing for the 2024 launch of GOSAT-GW, the third and the latest in this series, which has a planned operational lifetime of seven years. Concurrently, NIES is engaging in discussions to define the observational goals and technical specifications for future satellite missions succeeding GOSAT-GW.

The successful candidates will play a crucial role in this endeavor, primarily focusing on simulation-based studies to determine optimal satellite and sensor specifications. This involves the following works.

- (1) Evaluating the influence of Level 2 (L2) product quality on flux inversion estimates. This assessment will consider various observational characteristics, including measurement frequency, accuracy/precision, and spatial resolution;**
- (2) Simulating the observed spectra and analyzing how the quality of Level 1B data (such as spectral resolution, measurement accuracy, and spectral coverage)**

affects retrieval accuracy and precision; and

- (3) Engaging in the development and refinement of retrieval algorithms, atmospheric transport models, flux inversion systems, and data assimilation systems at NIES.

The successful candidates will be expected to contribute significantly to these areas, ensuring that future satellite missions are equipped with the most effective and advanced technologies for observing and understanding greenhouse gases. This position is ideal for someone passionate about environmental research and looking to impact future satellite-based observations in a meaningful way.

4. Qualifications

- (1) Ph.D. (Research Associate) or M.S. (Junior Research Associate)
- (2) Education in meteorology, atmospheric chemistry, remote sensing, or related study field
- (3) Experience in numerical model development, numerical simulation, or big data analysis using Fortran
- (4) Communication skills in Japanese or English

5. Selection Process

The selection process will be by means of a screening of applications followed by individual interviews. We will inform those applicants whose applications have passed the initial screening process on details of the interview.

6. Application Process/Application Documents

Applicants are requested to submit the following documents electronically:

- (1) CV (Prescribed format)
- (2) Summary of past research (max. 2 pages in A4 size)
- (3) Cover letter (with aspirations; max. 2 pages in A4 size)
- (4) Publication list (Sort by papers, books, and technical reports, and abstracts of oral presentations.)
- (5) Two supervisory references with their names and contact information

For information on how to send your application, please email the person in charge as described in 12 below, with “Application for Consideration of the specifications for a future greenhouse gas observation satellite” in the subject line.

(Submitted documents will not be returned. Application materials submitted by applicants other than the successful candidate will be properly discarded after selection is completed.)

Please list your past employments (names, addresses and periods) in the prescribed format CV. Indicate also if you had a contract with NIES other than an employment contract, such as collaborative researcher, visiting researcher, dispatch employee, etc.

7. Deadline

Application is open until filled.

8. Work Conditions and Related Regulations

Research Associates and Junior Research Associates are treated as Contract Employees.

Rank (Working Hours):

- | | |
|-----------------------------|--|
| * Research Associate | Exempt Working Hours (Weekdays) |
| * Junior Research Associate | full-time (7 hours and 45 minutes per day) |

The employee may be requested to work overtime and/or on holiday if necessary.

Compensation will be decided for payment based on the Regulations Regarding Remuneration for Contract employees at NIES.

Basic remuneration for Junior Research Associate: 14,060 ~ yen per day.

Basic remuneration for Research Associate: 4,968,000 ~ yen per annum.

Probationary Period: 6 months

For other matters pertaining to this employment, please ensure to refer to the Rules of Employment for Contract Employees at NIES and related regulations.

(Japanese only) <http://www.nies.go.jp/kihon/kitei/index.html>

9. Date of Commencement

The position will start as soon as possible after April 1, 2024.

10. Term of Contract

This is a contract position that, in principle, terminates at the end of the fiscal year (March 31, 2025). However, depending on the status of the research plan and performance evaluations, it may be possible for the Contract Employee to renew their yearly contract, although in principle, it cannot be extended past March 31, 2029.

11. Other

This work falls under the subject matter of Article 15-2 of the Act on Activation of Science and Technology and Innovation Creation.

(Japanese only) <https://elaws.e->

[gov.go.jp/search/elawsSearch/elaws_search/lsg0500/detail?lawId=420AC1000000063#98](https://elaws.e-gov.go.jp/search/elawsSearch/elaws_search/lsg0500/detail?lawId=420AC1000000063#98)

12. Contact Information

Applications should be directed to:

Dr. Yu SOMEYA

Earth System Division

National Institute for Environmental Studies

16-2 Onogawa, Tsukuba, Ibaraki 305-8506

Email: someya.yu *Please add “@nies.go.jp” at the bottom of the address.

Phone: +81-29-850-2576

This is an English translation of a Japanese document. If there is a discrepancy between the two documents, the Japanese version takes precedence.