

JOB VACANCY ANNOUNCEMENT

- Project Research Fellow (Project Researcher on Annual Salary System) at the GLAO project, National Astronomical Observatory of Japan (NAOJ) -

1. Job Title: Project Researcher (Project Research Fellow), one position

2. Division: Subaru Telescope

3. Work Location: National Astronomical Observatory of Japan (NAOJ), Mitaka, Tokyo

4. Area of Expertise: Astronomical Instrumentation, Adaptive Optics, Optical Metrology

5. Job Description:

This position is expected to gain expertise in a project, center, or center for future career and more than 50% of their time to spend for their own research.

The National Astronomical Observatory of Japan (NAOJ) has been operating the 8.2m Subaru Telescope located atop of Maunakea, Hawaii. The wide-field observation capability with excellent spatial resolution of the Subaru Telescope makes it one of the most scientifically productive ground-based telescopes in the world. ULTIMATE-Subaru is the next-generation facility instrument development project at the Subaru telescope, which will expand the Subaru's wide-field survey capability to the near-infrared (NIR) wavelength. The project consists of two instrument development programs: a ground layer adaptive optics (GLAO) system and wide field near-infrared instruments.

We invite applications for a postdoctoral researcher position in the NAOJ to work for the GLAO project and conduct research and development for an Adaptive Secondary Mirror (ASM) for the Subaru Telescope and its optical metrology system. A successful candidate for this position is expected to engage in the following tasks:

- (1) Determine the optimal metrology system for measuring the optical surface quality of the ASM for the Subaru telescope and its implementation plan.
- (2) Set up the optical metrology system and perform measurements and data analysis according to the GLAO's development schedule.
- (3) Survey on the technology of mirror surface metrology for large mirrors of 1 m diameter or larger.
- (4) Research and development of technologies related to the mirror surface metrology.

The position also provides the opportunity for the successful candidates to conduct their own research program in astronomy or related field.

6. Terms of Appointment:

The successful candidate is expected to start the job as early as reasonably possible after March 01, 2024. The term of employment will be up to three years, including the probation period of six months.

Note:

- (1) If the successful candidate had been employed by the National Institutes of Natural Sciences (NINS, which is an executive institute that manages NAOJ) within six months retroactively from the start date, the term will be set so that the total employment period does not exceed ten years.
- (2) If the successful candidate had been employed as an NAOJ Project Researcher (including Project Research Fellow) or a Researcher (Part-time Contract Employee), the term will be set so that the total accumulated period of employment does not exceed five years.
- (3) Annual performance review will be conducted.

7. Qualifications:

- (1) The applicant must have a PhD degree in astronomy, physics, optical engineering, or related field. Those who expected to have a PhD degree by the start date is also accepted.
- (2) Ability and experience to design and develop the optical metrology system that integrate hardware and software components.
- (3) Hands-on experience in evaluating the optical performance of optical components or system.
- (4) Communication skills in English including documentation and presentation.

8. Labor Conditions:

(1) Work Type and Work Hours:

The Discretionary Labor System for Professional Work shall be applied. (Standard work hours: 38.75 hrs/week, from 8:30 to 17:15 with an hour intermission)

(2) Holidays:

Saturdays and Sundays, National Holidays, New Year holidays (December 29th - January 3rd), Paid days off (annual leave, summer holidays, etc.)

(3) Social Insurances:

MEXT Mutual Aid Association (health insurance), Employees' Pension Insurance, Employment Insurance, Industrial Accident Compensation Insurance

(4) Remuneration:

The project researcher will be employed under an annual salary system, and will receive a salary of 350,000 JPY per month. Commuting expenses (up to 55,000 JPY per month) will be provided. Retirement allowances are not provided.

(5) Others:

- Day-care center for children (from 57 days old). *Availability depends on the situation. Childcare staff does not provide English support.
- Smoking is prohibited on the premises excluding designated outdoor smoking areas.
- Travel and relocation costs to NAOJ will be covered, subject to the travel regulations of NINS (details must be arranged with the administration office).

9. Selection Process:

A candidate will be selected through screening of application documents and interview (face-to-face or online). The expense for the interview will not be covered by NAOJ.

10. Required Application Documents: (*To be prepared in English or Japanese)

- (1) A curriculum vitae,
- (2) A summary of past research activities,
- (3) A list of publications (Separate refereed and non-refereed papers. For co-authored papers, list all the names of authors),
- (4) An outline of research plans,
- (5) One reference letter: Please ask your reference to upload the letter directly using the URL indicated in 12. before the application deadline. Applicants are responsible for ensuring that the letter is submitted before the application deadline.

11. Closing Date for Application:

December 28, 2023, 12:00(noon) (Japan Standard Time).

12. Submission:

Applicants are required to apply via the NAOJ Nextcloud on the web.

- (1) Please access the following URL for registration:
<https://forms.office.com/r/VhAPCXrTi9>
- (2) After you submit registration form, you will receive an email showing the URLs for (a) uploading your application documents, and (b) for your reference letter.
- (3) Please ask your reference to upload the letter via the URL (2)(b).
- (4) Please upload the application documents (from 10. (1) through 10. (4) above) via the URL (2)(a). These files must be in PDF format (max 50MB each, 100MB in total, at most 10 files).

13. Contacts:

If you have any question related to the job description, please contact;

Yosuke Minowa, Subaru Telescope, NAOJ

E-mail: minoways_AT_aoj.org (replace _AT_ with @)

If you have any question related to the other items, please contact;

E-mail: job11-pjt-researcher1_AT_ao.ac.jp (replace _AT_ with @)

14. Remarks

- Information submitted in your application documents will not be used for any purpose other than the selection process and for contacting you with necessary notices in connection with the selection. Once the selection process is complete, we will securely dispose of all application documents and personal information, except for those submitted by the successful candidate.
- The fellow will receive annual research funds of 500,000 JPY.
- Project researchers are eligible to apply for the Grants-in-Aid for Scientific Research (KAKENHI).
- Policy for Equal Employment Opportunity: Abiding by the Equal Employment Opportunity Act for Men and Women, NAOJ is committed to the realization of a society with gender equality. If two candidates are deemed equal in their performance evaluation, NAOJ will take positive action to employ women. If you have taken a leave(s) such as for maternity, childcare, and/or family care, please indicate it in your curriculum vitae. We will take it into account when assessing your performance. For details, see <https://www2.nao.ac.jp/~open-info/gender-equality/en/>.

15. Name of recruiter

Inter-University Research Institute Corporation, National Institutes of Natural Sciences (NINS),
National Astronomical Observatory of Japan (NAOJ)