

JOB VACANCY ANNOUNCEMENT

Tenure-track Assistant Professor, National Astronomical Observatory of Japan (NAOJ)

1. Job Title: Tenure-track Assistant Professor, one position
2. Division: Advanced Technology Center (ATC)
3. Work Location: National Astronomical Observatory of Japan, Mitaka, Tokyo (Japan)
4. Area of Expertise: Astronomical Instrumentation, Adaptive Optics, or related fields

5. Job Description:

The National Astronomical Observatory of Japan (NAOJ) has been playing a key role at the forefront of global astronomical research, as demonstrated in the construction and operation of large-scale astronomical facilities such as the Subaru Telescope, ALMA, and TMT (Thirty-Meter Telescope) and the development of space-based instruments such as the Hinode Satellite for solar observation, and strives to promote cutting-edge astronomy utilizing these advanced telescopes. The NAOJ Advanced Technology Center (ATC), the research center for developing advanced technology to support these important astronomical programs, has produced successful results in developing various astronomical instruments.

We invite applications for a tenure-track assistant professor position at the ATC. This position is open to qualified individuals who will work as research staff at the ATC to develop next-generation instrumentation, especially the on-going project: ULTIMATE-Subaru. It is the next-generation facility instrument development project at the Subaru telescope to expand the Subaru's wide-field survey capability to the near-infrared (NIR) wavelength. The project includes two instrument development programs: a ground layer adaptive optics (GLAO) system and wide field near-infrared instruments. The GLAO part of the project consists of an Adaptive Secondary Mirror, a laser guide star facility (LGSF) to produce for artificial laser guide stars, wavefront sensors (WFSs) with four laser and four natural guide stars, and a real-time control system. The development of the LGSF and WFSs are conducted in collaboration with the Australian National University (ANU). A successful candidate for this position is expected to work for the GLAO project and conduct research and development mainly for the LGSF and the WFS together with the team at the ANU.

We invite applications for a tenure-track assistant professor position in the NAOJ. The successful candidate for this position is expected to engage in the following tasks:

- (1) Work closely with the team at the ANU to maintain the requirements and interface of the GLAO LGSF/WFS and to complete their final design,
- (2) Participate in the prototyping, manufacturing, assembly, integration, and test of the GLAO LGSF/WFS in cooperation with the teams at the ANU and ATC,
- (3) Lead the integration and the full-system test of the GLAO LGSF/WFS at the Subaru telescope.

The successful candidate will be expected to stay at the ANU for a long term during the prototyping, final design, and manufacturing phases, which are expected to be completed in FY2026.

During a tenure-track term, the candidate will be hired under the JSPS international leading research program ("Comprehensive understanding of the formation history of structures in the Universe", PI: Prof. Satoshi Miyazaki). After passing the tenure-track review, the candidate will become a tenured assistant professor at the Advanced Technology Center and be expected to promote research and development related to adaptive optics (AO) or related field, to develop and lead future AO and instrumentation program at the Subaru telescope and TMT, and to cultivate young scientists who will lead future instrumentation program.

6. Terms of Appointment:

The successful candidate is expected to start the job as early as reasonably possible after the job offer has been accepted. Initial term of employment including the probation period of six months will be by the end of the JSPS international leading research program, which is expected to be the end of FY2028. The candidate will be reviewed by the end of the initial term for approval of being tenured. After being tenured, the term of employment will continue up to the end of the Japanese academic year, in which the post-holder reaches NAOJ's mandatory retirement age of 65.

Note:

- (1) If the successful candidate has been a fixed-term employee of the National Institutes of Natural Sciences (NINS, which is an executive institute that manages NAOJ) within 6 months prior to the appointment, the appointment will not be made if the total period of fixed-term employment exceeds 10 years.
- (2) Annual performance review will be conducted.

7. Qualifications:

- (1) PhD degree or equivalent in astronomy, physics, optical engineering, or related field. Those who are expected to have a PhD degree by the start date are also accepted.
- (2) To have a proven track record of achieving internationally recognized research in the field of expertise through peer-reviewed publications in relevant journals.
- (3) Experience as the lead or as a key member of a development team for large-scale astronomical projects will be highly evaluated.
- (4) To have communication skills in English including documentation and presentation.

8. Required Application Materials:

(*To be prepared in English. Any other language will not be accepted.)

- (1) A cover letter;
- (2) A curriculum vitae;
- (3) Publications list (Separate refereed and non-refereed papers. SPIE can be included in refereed papers.);
- (4) A summary of your past research activities, including international collaborations;
- (5) Your commitment and plan to fulfill the duties (including your research plan as needed);
- (6) Your contact address (email and phone) and the email address of your current supervisor or line manager.
- (7) Three or more reference letters. Reference letters should be written by faculty/staff with tenured positions. Reference letters from multiple countries are preferred. Please ask your references to upload the letters directly to the URL indicated in 10 before the deadline. Applicants are responsible for ensuring that the letters are submitted before the application deadline.

9. Application Deadline: 2024-05-15, 12:00 (Japan Standard Time)

10. Application Instructions:

10.1. How to Submit an application:

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/HhJHReEjt7>

- (2) After you submit the registration form, you will receive an email showing the URLs for
 - (a) uploading your application documents and
 - (b) your reference letters.
- (3) Please ask your references to upload their letters via the URL shown in (2)(b).
- (4) Please upload the application documents (from 7. (1) through (7), above) via the URL (2)(a). These files must be in PDF format (max 50 MB each, 100 MB in total, at most 10 files).

10.2. Contacts:

- (1) If you have any questions related to the job description, contact;
Email: masayuki.hirabayashi_AT_nao.ac.jp (replace _AT_ with @)
Attention to: Hirabayashi, Masayuki, Director of Advanced Technology Center, NAOJ,
Subject: "Question on Assistant Professor at the NAOJ ATC"
- (2) If you have any questions related to other items, contact;
E-mail: job04-assistantprof_AT_nao.ac.jp (replace _AT_ with @)
Subject: "Question on Assistant Professor at the NAOJ ATC"

11. Notes for application:

- (1) Candidates selected in the final shortlist may be interviewed by the selection committee either in person or online. NAOJ will not cover any expenses associated with the interview.
- (2) If the selection committee determines that there are no qualified candidates for this position, this announcement may be closed without any selections.

12. Work 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:
Salary: Annual salary shall be determined based on professional knowledge, skills, required education, and job experiences as per the NINS regulations (NINS, or the National Institutes of Natural Sciences, is an upper-level organization that manages NAOJ). Payments will be made monthly in 12 equal installments.
Allowances: Dependent allowance, residential allowance, commutation allowance, and other allowances will be paid to employees who meet the conditions outlined in the NINS regulations. An amount equivalent to the year-end allowance and diligence allowance will be included in the annual salary.
Salary Increment: Once a year in accordance with the performance review
Retirement Allowance: Provided
Travel and relocation: Eligible employees will be provided with a relocation travel package to NAOJ, subject to the travel regulations of NINS (details must be arranged with the administration office).

13. Miscellaneous:

- (1) This position is subject to the NINS Employee Regulations. The annual salary schedule indicated in Table (2) of the Research-Education Employee Base Annual Salary shall be applied to this position.
- (2) Policy for Equal Employment Opportunity: Abiding by the Equal Employment Opportunity Act for Men and Women, NAOJ is committed to realizing 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) for maternity, childcare, and family care, please indicate it in your curriculum vitae. We will consider it when assessing your performance. For details, see <https://www2.nao.ac.jp/~open-info/gender-equality/en/>
- (3) Smoking is prohibited on the premises excluding designated outdoor smoking areas.
- (4) 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 those submitted by the successful candidate.

14. Recruiting Institution:

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