

JOB VACANCY ANNOUNCEMENT

Senior Specialist, ALMA Project, National Astronomical Observatory of Japan (NAOJ)

The Atacama Large Millimeter/submillimeter Array (ALMA) is currently the most advanced on-ground radio telescope at millimeter and submillimeter wavelengths. It is located in Chile and operated by a global partnership of East Asia, North America and Europe, in cooperation with the Republic of Chile. To keep its high scientific productivity, ALMA will undergo major upgrade, i.e., ALMA Wideband Sensitivity Upgrade (WSU).

The Computing team in ALMA Project in NAOJ develop and maintain software for the ACA Spectrometer, which is used in single dish observations in ALMA, in collaboration with Korea Astronomy and Space Science Institute (KASI). The ACA Spectrometer will be upgraded to the Total Power GPU Spectrometer for WSU in collaboration with KASI.

This position is for a person who is based at the Mitaka Headquarter of NAOJ and is responsible for development, maintenance, and tests of software for ACA Spectrometer and for WSU including the Total Power GPU Spectrometer.

【Vacant Post】 One Senior Specialist (employee on annual salary system)

【Division】 ALMA Project

【Duty Station】 2-21-1 Osawa, Mitaka, Tokyo, Japan (Scope of possible changes) No changes

【Responsibilities】

The successful candidate's major responsibilities are as follows:

- Development and maintenance of software of ACA Spectrometer for ALMA telescope
- Development and maintenance of software for ALMA WSU including that of the Total Power GPU spectrometer.

(Scope of possible changes) Responsibilities determined by NINS/NAOJ

【Term of Employment】

Employment will start from the date as soon as reasonably possible after the job offer has been accepted. The term is for 3 years (※1), including the probation period of 6 months.

※1: In the final fiscal year of the employment, NAOJ will conduct a review on the amount of assigned work, the status of ongoing work, work skills, work performance, work attitudes, and the financial situation of the National Institutes of Natural Sciences (NINS) at the expiration of the term of employment. Based on the review results, the term of employment may be extended. (※2)

※2: For a person who has been employed by NINS within 6 months retroactively from the starting date, the term will be set so that the total employment period will be less than 10 years

【Qualification Requirements】

Minimum Experience and Skills:

1. Proficiency in C++, Java or Python.

2. Proficiency in English: Ability to read and write software documents in English. Communication skills in English equivalent to TOEIC score higher than or equal to 600 points, or EIKEN Grade 2.
3. Experience of developing software on a Unix (Linux) OS.

Preferred Experience and Skills:

4. Experience in writing software design and specification documents.
5. Experience in developing high performance programs using GPU processing.
6. Experience in developing software in collaboration with team members.
7. Experience in designing, developing, testing and operating instruments (not limited to astronomical instruments).
8. Knowledge or practical experience in signal processing methods like Fourier analysis and FFT.

【Working Hours】

- 5 days a week (Monday through Friday) with Saturday and Sunday off, national holidays, year-end and new year holidays (from December 29 through January 3 of the next year).
- From 8:30 am (start of working hours) to 5:15 p.m. (closing of working hours) including 60-min lunch break each day. The total working hours will be 38.75 hours a week.

※ Order of overtime work may be expected in a special occasion when required in the assigned work.

【Compensation】

Salary will be paid based on annual salary system, equivalent to an assistant professor at national universities or equivalent to a Research Engineer at NAOJ in job classification.

- One-twelfth of the annual salary will be paid every month. The amount of annual salary is determined according to responsibilities of work, actual performance, and experience etc.
- Salary will be reviewed every fiscal year according to the results of performance reviews.

Commuting allowance (up to 55,000 yen / month) *Allowances are provided pursuant to the NINS internal rules and regulations.

Health insurance, pension insurance, unemployment insurance, and industrial accident insurance will be provided.

Paid days off (annual leave, refreshment leave, and bereavement leave, etc.)

Day-care center for children (from 57 days after birth). *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).

【Selection Process】

A candidate will be selected through screening of application documents and interview.

【Application Documents】

- (1) A curriculum vitae
- (2) A summary of past work experiences (can be merged with the document (1))

- (3) A personal statement describing intentions for the applied position including related experience and achievements (in two pages of A4 sized paper). Please indicate to what extent the applicant meets the items listed in **【Qualification Requirements】**, and a TOEIC score and/or the Grade of EIKEN should be provided if the applicant has taken the exams.
- (4) Your e-mail address and phone number for prompt contact

【Application Deadline】 Noon in JST on January 7, 2025

【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/vB73nt3CgY>
- (2) After you submit the registration form, you will receive an email showing the URL for uploading your application documents.
- (3) Please upload the application documents via the URL. These files must be in PDF format (max 50MB each, 100MB in total, at most 10 files).

Notes:

- After submitting the registration form, you will receive a notification email containing the URL for uploading your application documents within three business days, excluding weekends and public holidays.
- Please ensure that the notification email does not get filtered into your spam or junk mail folder.
- Application documents must be in PDF format (maximum of 50MB each, 100MB in total, at most 10 files).
- After submitting your application documents, you will receive a confirmation email within three business days, excluding weekends and public holidays.
- If you do not receive any response from NAOJ, please contact the email address below.

【Contacts】

(Inquiry about application)

NAOJ Personnel Unit, General Affairs Group, Administration Department

E-mail: jobregister-contact-10_AT_nao.ac.jp (replace _AT_ with @)

(Inquiry about job details)

NAOJ ALMA Project, Kanako Sugimoto

E-mail: kanako.sugimoto_AT_nao.ac.jp (replace _AT_ with @)

Subject of e-mail: "Question on Senior Specialist (ACA software) at ALMA Project"

【Name of recruiter】

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

【Others】

- Candidates selected in the final short list may be interviewed by the selection committee either via internet or face-to-face. The expense for the interview will not be covered by NAOJ.

- This position is not applicable to the debt-forgiveness program of the Japan Scholarship Foundation.
- Abiding by the Equal Employment Opportunity Act for Men and Women, NAOJ is committed to the realization of a society with gender equality. If candidates are deemed equal in their performance evaluation, NAOJ will take positive action to employ women. For details, see <https://www2.nao.ac.jp/~open-info/gender-equality/en/>
- 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.