JOB VACANCY ANNOUNCEMENT

Associate Professor at ALMA Project, National Astronomical Observatory of Japan (NAOJ)

The National Astronomical Observatory of Japan (NAOJ) announces a vacancy for a position to lead the process of development and implementation of hardware components for the observing system of ALMA as an engineer in the NAOJ ALMA Project in collaboration with international partners of ALMA.

- 1. Job Title: Associate Professor, one position
- 2. Division and Location: NAOJ ALMA Project, NAOJ, Mitaka, Tokyo 181-8588, Japan (Scope of possible changes) Place designated by NINS / NAOJ
- 3. Area of Expertise: Instrumentation in Astronomy
- 4. Job Description:

The National Astronomical Observatory of Japan (NAOJ) has been playing a leading role at the forefront of global astronomical research. ALMA is the largest (sub)mm-wave on-ground telescope and has been producing ground-breaking science since it became operative in 2011. In order to keep its high scientific productivity, ALMA will be upgraded towards addressing the updated scientific goals identified in the ALMA Development Roadmap.

We invite applications for one Associate Professor who is based in Mitaka, at NAOJ Headquarters, and whose primary mission is to lead the development process including assembly, integration and verification for hardware components in the ALMA observing system, and to significantly contribute to the implementation of the WSU (Wideband Sensitivity Upgrade).

Efforts are currently and will be underway to develop the hardware and software necessary to significantly enhance the observing capabilities of ALMA (Wideband Sensitivity Upgrade; WSU). In addition, obsolescence measures are being taken to properly maintaining the existing facility as the basis for such significant upgrade. The NAOJ ALMA Project is working closely with the Advanced Technology Center (ATC) to develop and maintain hardware components such as the WSU data transmission system, antenna control and drive systems, and receivers for which the East Asia region is responsible.

The successful candidate will be expected to belong to the East Asian ALMA Development Team in order to (1) lead the process of at least one of the development items (the data transmission system, antenna control/drive system, receivers, spectrometer for the Total Power Array, etc.), and (2) contribute to the implementation of the WSU observing system in ALMA.

To fulfill the responsibility, the applicant is expected to have the engineering ability to advance astronomical research and development, or to have the basic knowledge and high motivation to acquire such ability. Knowledge of radio telescopes and instrumentation is necessary. English proficiency is also necessary since the successful candidate will work in English-speaking teams in NAOJ and also in collaboration with the ALMA partners in Chile, Europe, North America, Taiwan and Korea.

The responsibility of this position includes research in astronomy or related field. It also includes fostering collaborations among NAOJ scientists and engineers, and developers in ATC and other divisions to stimulate productivity of science and development by making the best use of the strengths of NAOJ. Fostering young scientists, engineers and technicians including PhD students is also required as part of the job responsibility.

(Scope of possible changes) Research and Teaching Activities designated by NINS / NAOJ

5. Terms of Appointment:

The successful candidate is expected to start the job as early as reasonably possible after accepting the job offer. 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. The hired candidate will undergo a six- month probationary period upon commencement of employment.

- 6. Qualification Requirements:
 - (1) Minimum Educational Requirement: PhD degree in astronomy or related field;
 - (2) To have basic knowledge of radio telescopes and instrumentation;
 - (3) To have good communication skills and sufficient English language proficiency to join, discuss and collaborate in English-speaking teams;
 - (4) Experience participating in the development of astronomical instruments is preferred;
 - (5) Strong interpersonal communication skills and the ability to work in a team with diverse cultural background will be considered important assets for this position.
- 7. Required Application Materials: (*To be prepared in English)
 - (1) Cover letter;
 - (2) Curriculum vitae;

(3) Publications list (Separate refereed and non-refereed papers. SPIE can be included in refereed papers);

- (4) Summary of your past activities related to the duties for this position;
- (5) Your commitment and plan to fulfill the duties;

(6) Your address (e-mail and phone) for prompt contact and the email address of your current supervisor or line manager; and

(7) Two or more reference letters. Please ask your references to upload their letters directly using the URL indicated in 9.1.(2) before the application deadline. Applicants are responsible for ensuring that the letters are submitted before the application deadline.

- 8. Closing Date for Application: 2024-11-29, 12:00 (noon) (Japan Standard Time)
- 9. Application Instructions:
 - 9.1 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/4gMrbipDf3
- (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 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 (6) above) via the URL(2)(a). These files must be in PDF format (max 50MB each, 100MB in total, at most 10 files).
- 9.2 Contacts:
- (1) If you have any question related to the job description, contact;
 E-mail address: misato.fukagawa_AT_nao.ac.jp (replace _AT_ with @)
 Misato Fukagawa, NAOJ ALMA Project Manager, NAOJ
 Subject of e-mail: "Question on JD of Associate Professor in NAOJ ALMA Project"
- (2) If you have any question related to the other items, contact,
 E-mail address: job02-associateprof _AT_nao.ac.jp (replace _AT_ with @)
 Subject of e-mail: "Question on Application for Associate Professor in NAOJ ALMA Project"
- 10. Notes for Applications:
 - (1) Candidates selected in the final short list may be interviewed by the selection committee either via the internet or face-to-face. The expense for the interview will not be covered by NAOJ.
 - (2) If the selection committee determines that there are no qualified candidates for this position, this announcement may be closed without any selections.
- 11. Working 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), Annual paid leave (20 days: to be prorated for the first year), Refreshment leave (3 days), Bereavement leave, etc.
 - (3) Social Insurance: 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).
- 12. Miscellaneous
 - The NAOJ Advisory Committee for Research and Management will make the final decision for the appointment.
 - 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.

- 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. For details, see https://www2.nao.ac.jp/~open-info/gender-equality/en/
- If you have taken a leave(s) for maternity, childcare, and family care, please indicate it in your curriculum vitae. We will take it into account when assessing your performance.
- Smoking is prohibited on the premises excluding designated outdoor smoking areas.
- 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.

13. Recruiting Institution:

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