JOB VACANCY ANNOUNCEMENT

Project Assistant Professor, National Astronomical Observatory of Japan (NAOJ)

NAOJ announces a Project Assistant Professor position for an Optics and Antenna Scientist at the East Asian ALMA Support Center (EA ASC) of the NAOJ ALMA Project to lead receiver optics and antenna studies for the development of the ALMA telescope, and other related future studies. The successful candidate will be placed in the ALMA Project Development team at the NAOJ Advanced Technology Center.

1. Job Title: Optics and Antenna Scientist / Project Assistant Professor, one position

2. Division and Location: NAOJ ALMA Project, Mitaka (Japan)

3. Area of Expertise: Antenna and Microwave Engineering, Electromagnetics and/or Radio Astronomy

4. Job Description:

This position is for a scientist with a deep knowledge in antenna and microwave engineering who can lead development studies of antennas, and receiver optics for future ALMA upgrades, and for planning of collaborations to increase the scientific output of ALMA, such as ngVLA.

The successful candidate is expected to contribute new receiver optics and waveguide component designs (corrugated horns, OMTs…) for future receiver upgrades from NAOJ, and in collaboration with other ALMA partners. He/she is expected to take a leading role in the ALMA Project Development team, provide leadership in the receiver optics group and consider how to exploit the use of 3D printing at ATC for novel high-performance components which can be used in the next generation of ALMA receivers. In addition to receiver optics and microwave engineering, he/she is also expected to have a good knowledge in reflector antennas, in order to be able to support antenna development studies to be started in the coming years. The connection between receiver optics and reflector antennas is clear and expertise in both fields will be key to enhance the performance of ALMA, and future telescopes such as ngVLA, as for instance, the improvement of cross-polarization and aperture efficiency by optimizing receiver optics together with reflector antenna optics.

The successful candidate is expected to work in international working groups together with engineers and scientists from all ALMA regions, and to provide timely input to the EA-ALMA Project Manager and the EA Development Manager. He/she is also expected to actively contribute to establish and deepen technical international collaborations with ALMA partners in the field of antennas and receiver optics.

This Optics and Antenna Scientist will be placed at the NAOJ Advanced Technology Center (ATC), to be in close contact with the ALMA Receiver Development team at ATC, with state-of-the-art test and fabrication facilities. Therefore, the successful candidate is also expected to be knowledgeable in related test systems and fabrication procedures.

Apart from high technical knowledge on antennas and optics, the successful candidate must have good communication and negotiation skills and be able to work in large international teams in English. As part of his/her work, he/she is expected to be scientifically active and actively publish journal papers, attend international conferences, and prepare other technical and scientific documentation. It is envisioned that the successful candidate will raise the state of NAOJ presence within ALMA, as an overall outcome of the above activities.

5. Terms of Appointment:
   The successful candidate should be able to start as soon as reasonably possible after the job offer has been accepted.
   The term is for five (5) years, including the probation period of six (6) months. Annual performance review will be conducted. In case that the successful candidate was an NINS employee after 2013 April 1, the term may be set so that the total accumulated terms of the employment does not exceed ten (10) years.

6. Minimum Academic Requirements:
   (1) Ph.D. or equivalent in astronomy or related fields;
   (2) Deep knowledge of antenna and microwave engineering, and/or electromagnetics. Knowledge of optics, radio astronomy and interferometry will be an asset;
   (3) Capability to join, discuss and collaborate in English-speaking teams;
   (4) High motivation to work in international groups and collaborate with other members of ALMA, in the EA-ASC, ATC and ALMA partners

7. Required Application Materials: (*To be prepared in English. Any other language will not be accepted)
   (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 research activities including international collaborations;
   (5) Your plans to fulfill the responsibilities and aspirations for the position (including your research plan as needed);
   (6) Your easily reachable contact information (e-mail and phone) and the e-mail address of your current supervisor or line manager.
   (7) Two or more reference letters. Note that your current supervisor or line manager cannot be your reference. Please ask your references to upload the letters directly to an NAOJ job application system shown in 9 before the deadline. Applicants are responsible for ensuring that the letters are submitted before the application deadline (Reference letters should be written by faculty/staff with tenured positions, and no more than one reference letters will be accepted from each country).

8. Application Deadline: 2020-03-16, 17:00 (Japan Standard Time)

9. Submission:
   Applicants are required to apply via the NAOJ job application system on the web:
   https://jobregister.nao.ac.jp/
   Please fill out the form on the web and upload the documents specified on the application form. If it takes time to prepare the documents, applicants should be issued an applicant ID and reference IDs in advance. Reference letters should be uploaded by persons who have written the letter for you directly, following the instruction shown on the application form. Reference IDs and passwords are required to upload reference letters, so please inform references of the issued reference IDs and passwords. The application documents should be converted to PDF (max 50MB each, 100MB in total, at most 10 files).

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

   (E-mail address) Alvaro.Gonzalez_AT_nao.ac.jp (replace _AT_ with @)

   Alvaro Gonzalez, NAOJ ALMA Project Manager
   Subject of e-mail: “Question on JD of Project Assistant Professor in NAOJ ALMA Project”

If you have any question related to the job application system or other items, contact;
E-mail: JobRegister-contact-10_AT_nao.ac.jp (replace _AT_ with @)
Subject of e-mail: “Question on Project Assistant Professor in NAOJ ALMA Project”

10. Notes for application:

- Candidates selected in the final short list may be interviewed by the selection committee either via internet or face-to-face. The expense for travel to the interview will not be covered by NAOJ.
- If the selection committee deems that there is no qualified candidate for this position, it is possible no one will be selected.

11. Remarks

- The NAOJ Advisory Committee for Research and Management will make the final decision for the appointment.
- 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. For details, see http://open-info.nao.ac.jp/danjokyodo/
- 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.