Job Announcement for a Specially Appointed Assistant Professor (Tenure-track system)
at the Institute of Space and Astronautical Science,
the Japan Aerospace Exploration Agency

The Japan Aerospace Space Exploration Agency (JAXA) is seeking to recruit a Specially Appointed Assistant Professor (Fixed-term Academic Staff) for the Department of Spacecraft Engineering, Institute of Space and Astronautical Science (ISAS), as described below:

1. Title and Number of Position(s)
One Specially Appointed Assistant Professor (Fixed-term Academic Staff)

2. Department
Department of Spacecraft Engineering, Institute of Space and Astronautical Science, JAXA
Institution URL: http://www.isas.jaxa.jp/en/index.html
Department outline: http://www.isas.jaxa.jp/en/about/organization/spacecraft.html

3. Summary of Position (Duties and Required Abilities)
The Institute of Space and Astronautical Science (ISAS) is contributing to the demonstrative research on the origin and evolution of the solar system fusing interested planetary scientists and space engineering researchers, as well as by enhancing the function of inter-university cooperation. It has also started investigations into a programmatic approach to solar system exploration and strategic development of very small spacecraft for solar system exploration. One of the key technologies that enable high-level solar system exploration is the technology for reliable, high-speed communications over long distances. Development of high-performance and efficient devices such as transmitters, receivers, and signal processors for is needed for that purpose. For communications with spacecraft, high-performance communications systems used on the ground are necessary, as well as those used onboard spacecraft. It is mandatory to develop high-performance onboard and ground communications systems, in order for future solar system exploration projects to send massive data from space to ground.

For this position, we are seeking a candidate who will participate in the solar system exploration projects (including very small spacecraft projects) and ground system development projects, and lead the development of communications equipment, cooperating with researchers and engineers in these communities. In solar system exploration projects, special components not used in communications on the ground are needed, such as high-power transmitters, low-noise receivers, and signal processing technologies to extract data from noisy signals. The candidate is expected to design, prototype, and lead the development of such components with new ideas based on his/her own research results. In addition, the candidate is encouraged to contribute to development of science detectors utilizing communications technologies. If the candidate is approved to have achieved ability to lead future solar system exploration projects and ground system development projects on a higher level, an Associate Professor position (Full-time/Retirement age is 63) at ISAS will be tenured (See below for details).

During the term of research, the successful candidate is expected to:

1) Conduct basic research on communications technologies for solar system exploration based on her/his own ideas.
2) Lead the development of high-performance, efficient communications components (such as transmitters, receivers, and signal processors) necessary for JAXA's future deep space spacecraft (including very small spacecraft) by designing and prototyping such components.
3) Contribute to the construction and maintenance of JAXA's ground stations for deep space from the perspective of communications technologies.
4) Conduct research in collaboration with researchers from other universities based on the understanding that JAXA/ISAS acts as an inter-university research system. In addition, the successful applicant will engage in teaching and directing graduate students and will actively participate in various studies and projects conducted within JAXA.

To fulfill these duties, applicants who apply for this specially appointed assistant professor (tenure-track system) position need to satisfy, at minimum, the following conditions:
- Possess experiences in research and practice in the field of space communications, and experiences in development of communications equipment.
- Have a clear vision concerning communications technologies and equipment development for future solar system exploration.
- Be capable of teaching and directing graduate students

4. Eligibility
(1) PhD degree is required (including expected PhD by the date of adoption)
(2) Applicants must have degrees earned within eight years, in principle, from the application deadline date, or are expected to earn their degrees by the hire date.

5. Commencement of Assignment
At the earliest possible date after selection

6. Employment Status
Full-time

7. Terms
The contract term shall be within the fiscal year, and the renewal of the contract term shall be limited to within five years from the commencement of the initial employment contract.

8. Interim Evaluation and Performance Review
(1) The successful applicant will, by consulting with the research director, the program director of space science, the project manager of a relevant space science project and the director of a relevant department, make necessary modifications to the research plan submitted upon application. This modification should be intended to make a tenure-track career plan into a clearer shape within five years and should be made soon after the beginning of the track.
(2) An interim evaluation is positioned approximately two years after the beginning of the track.
(3) After the interim evaluation and before the end of the term, a review of performance during the tenure-track period will be made. A performance review can be held up to twice during the interval. When the review finds the specially appointed assistant professor to possess expertise that is indispensable for the future of ISAS, an associate

professor position at ISAS will be tenured. The performance review can be held simultaneously with the interim evaluation at earliest.

(4) The interim evaluation and the performance review will be conducted by forming a committee that includes directors at ISAS as well as external members from relevant academia.

9. Viewpoints of Performance Review

The performance review shall be conducted from the viewpoints listed below. These are the points inspected upon selection from among candidates who apply in response to the job announcement of an associate professor position at ISAS. An associate professor at ISAS is expected to show good leadership in ISAS activities and to indicate a future vision that is shared by members of an academic group who work together toward a common goal.

(1) In project-related work, did a specially appointed assistant professor's expertise lead to the high performance that is expected of a project core team member? Was the output substantial enough to make the assistant professor a strong candidate for a senior position in the project team, such as project scientist or project engineer?

(2) In addition to project-related work, did the assistant professor produce high-quality research results? Were the results of good enough quality to receive high evaluation of the relevant academia, or her/his possibilities for the future?

(3) Did the assistant professor show good leadership to young colleagues that encouraged them to perform better in project-related work or to make significant progress in research?

(4) Through the experiences gained during a tenure-track career, has the assistant professor reached a future vision in any area of astronomical science that may be relevant to the future of ISAS? Is the future vision (or, will the future vision be) attractive enough to be shared by an academic group that works together towards the goal indicated in it, or show high possibilities of doing so?

10. Duty location

JAXA Sagamihara campus (ISAS), Kanagawa, Japan

11. Position

Specially Appointed Assistant Professor, ISAS (Fixed-term Academic Staff, JAXA)

12. Terms and Conditions

(1) Based on JAXA rules and regulations

(2) Salary will be determined under the provision of JAXA wage rules and regulations, taking into account ability and experience.

(3) Research funding: JPY1,000,000 is paid as traveling and research expenses every year

(4) Working days: Monday – Friday, except Japanese national holidays, year-end and new-year holidays, paid vacation, summer vacation, celebration or condolence leave, maternity leave, child-care leave, care leave, nursing leave, volunteer activities, etc.

(5) Office hours: 9:30-17:45, in principle, with a recess from 12:15 to13:00 (however, a discretionary labor system is applied).

(6) Overtime work: may be required (however, a discretionary labor system is applied, and working hours per day are regarded as 7.5 hours).

(7) Lodgings: lodgings suitable for a family or a single occupant may be provided under the provision of JAXA in consideration of the nature of the work. (Lodging term is limited to 7 years.) Alternatively, an allowance for lodging shall be paid.

(8) Social insurances (health insurance, pension plan, etc.) will be provided in full.

13. Application Documents
Submit one copy each of the following:
(1) Curriculum vitae
(2) Research career
(3) List of research achievements, including published papers and other publications
(4) Summary of previous research and outline of future research plan (Including contribution to projects and ambitions for educational activities. The three items expected of the successful candidate in "3. Summary of Position" should be born in mind.)
(5) List of awarded research funds through competition (type of funds, amount, principal investigator or co-investigator)
(6) Contact information of two referees (names, addresses, telephone numbers, and e-mail addresses for a direct inquiry from JAXA). If you are recommended by others, please provide two letters of recommendation.
(7) Photocopies of major research papers or other publications (within three papers) published in refereed academic journals

14. Submission:
Submit the application through the following website
https://isas-appli-form.jaxa.jp/forms1/ 1545108543
following the instructions on the site.
All of the files to be uploaded shall be in pdf format. Note that documents (2) to (6) need to be merged into one pdf file.
Referees will be asked to upload their recommendations directly to the website.
Application delivered in person or by mail shall not be accepted.

15. Application Deadline:
Wednesday, May, 1, 2019, 9: 30(JST).

Applies to both web input and all necessary files, including letters of recommendation for recommended applicants.

Please access the above website and check how to submit necessary documents for application (including letters of recommendation if the applicant is recommended by others) as soon as possible. If application is made to close to the deadline, it will be difficult for recommenders to submit a letter of recommendation. Please secure enough lead time so that all the necessary documents will be ready before the deadline.

16. Contact at the Department of Space Flight Systems:
Institute of Space and Astronautical Science, JAXA
Prof. Takashi Kubota
Tel: +81-50-3362-3657 E-mail: kubota.takashi@jaxa.jp

For inquiries regarding Application Submission in Section 14:
Management and Integration Department
Human Resources Section
Fax: +81-42-759-8440 E-mail: ISAS-JINJI@ml.jaxa.jp

17. Other Remarks

Applications will be examined and selected by the Advisory Council for Research and Management of ISAS, JAXA.

The selection process will be consistently done with the peer review process of LEADER.

If the applicant is younger than 40 years old on April 1 2020, he or she is expected to apply also Job Announcement for Leading Initiative for Excellent Young Researchers (LEADER) in the following HP address

http://global.jaxa.jp/about/employ/index.html

Traveling expenses necessary for the examination and selection shall be borne at the applicant's own expense. ISAS/JAXA actively welcomes female applicants.

<Handling of Personal Information>

The personal information provided to ISAS/JAXA will be used and handled solely for the selection purpose. ISAS/JAXA will discard all personal information of unsuccessful applicants after the selection.

※<Consent form for handling personal information based on GDPR>

For the purposes of affairs related to the selection and human resource management, JAXA needs to collect your personal data requested in the present form.

You may at any time object to the use of your data for this purpose by writing to the following address: ISAS-JINJI @ml.jaxa.jp

You will find below all the detailed information concerning this processing of your personal data and a reminder of your rights, in application of the legislation in force.

JAXA, willing to respect the privacy and protection of personal data of its prospects and clients, complies with the legislation in force regarding the protection of personal data as data controller, and in particular Law no. 78-17 of 6 January 1978 (the "Data Protection Act") and, from 25 May 2018, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and the free movement of such data (the "GDPR").

JAXA does not transfer personal data to third countries or parties outside the European Economic Area.