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 Solar System Sciences, 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 Solar System Sciences, Institute of Space and Astronautical Science (ISAS) Institution URL: http://www.isas.jaxa.jp/en/index.html

Department outline: http://www.isas.jaxa.jp/en/about/organization/solarsystem.html

3. Summary of Position (Duties and Required Abilities)

The Institute of Space and Astronautical Science (ISAS) is contributing to demonstrative research on the origin and evolution of the solar system that led to the formation of the Earth as a habitable planet by promoting solar system exploration that fuses interested planetary scientists and space engineering researchers, as well as by enhancing the function of interuniversity cooperation. In order for Japan's planetary community to play a meaningful role in the landscape of international competition and collaboration, and in order for the community to design its missions in a strategic manner, a leader is needed who will clarify its strength and weakness.

Specifically, the successful candidate will be expected to effectively carry out the following three categorized missions:

(I) Japan's leading of strategic medium-class missions that aim to solve the most significant problems of planetary science with international collaboration, (II) Competitive small-class missions that aim to find the answers to unresolved and fascinating problems of planetary science with possible international collaboration, and (III) Participation in international large-class missions that are too large for Japan to take the lead in order to resolve the most significant problems of planetary science.

The Department of Solar System Sciences promotes scientific studies of the heliosphere and of solar system bodies via spacecraft missions that perform remote sensing observations as well as in-situ observations. Mission-related activities at the Department include data analysis studies, numerical simulation studies, and the development of new observation technologies. As the Department also plays key roles in constructing solar system science missions, the capability to strategically plan planetary explorations is expected of all members of the Department. Currently, the Department is promoting sample-return missions in order to understand the origin and evolution of the solar system. The Department is also developing world first science instruments for in-situ mass analysis of isotopes of C, H, O, N and organic molecules that are indispensable for resolving the origin of life.

For this position, we are seeking a candidate who will be a core member of the team to develop the onboard mass spectrometer mentioned above by collaborating with relevant Japanese communities and space engineers as well as contributing to on-going missions or missions under preparation by taking advantage of her/his expertise.

In addition, the candidate is expected to comprehend the clear image of future space science and improve her/his ability through experiences obtained during the term of research. If the candidate is approved to have achieved ability to lead future solar system exploration including strategic medium class mission, 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) Contribute to promote future ISAS planetary mission activities by developing the chemical analysis methods and data processing schemes necessary for planetary exploration.
- 2) Promote development of an onboard mass spectrometer as a core member of the development team by working closely with other team members, Japanese industrial partners and international partners in order to maximize the science output.
- 3) Conduct research in collaboration with researchers from other universities based on the understanding that JAXA/ISAS acts as 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, the applicants who apply to this Specially Appointed Assistant Professor (Tenure-track system) needs to satisfy, at minimum, the following conditions:

- Possess a record of material analysis as well as development of chemical analysis apparatus and analysis method using the apparatus
- Be ready to expand the scope of her/his own research in planetary sciences
- 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 to 13:00 (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) 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/forms1/1522918044

following the instructions on the site.

All of the files to be uploaded shall be in pdf format. Note that documents (2) to (5) need to be merged into one pdf file.

If the applicant is recommended by others, we will request recommender(s) to directly upload their letters of recommendation to the website. (This request will be automatically sent to the email addresses of recommender(s) specified by the applicant.) Application delivered in person or by mail shall not be accepted.

15. Application Deadline:

July 2, 2018, 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 Department of Solar System Sciences Prof. Yoshifumi Saito Director

Tel: +81-50-3362-4632 E-mail: saito.yoshifumi@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@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 performed in a manner consistent with the peer review process of LEADER. If the applicant is younger than 40 years old on April 1, 2019, he or she is expected to apply also to the Job Announcement for Leading Initiative for Excellent Young Researchers (LEADER) in the following website address

https://www.jsps.go.jp/j-le/koubo_kenkyu.html

This job announcement comes into effect when there are three applicants or more. If there are fewer than three applications, the announcement will be made again.

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.