

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) as described below :

1. Title and Number of Position(s)

One Specially Appointed Assistant Professor (Fixed-term Academic Staff)

2. Department

Department of Space Flight Systems, Institute of Space and Astronautical Science (ISAS)

3. Summary of Position (Duties and Required Abilities)

Future space science missions currently being envisioned such as space observations, solar system explorations, and space transportation systems will require far greater requirements than those available at present; including more sensitive measurements, greater pointing accuracy, the ability to operate in more challenging environments, aircraft-like turn-around operations, and others. Solar-system explorers require operation capability in extremely challenging thermal environments as well as tight thermal control with minimal spacecraft resources. Astronomical satellites require high-level and special temperature control such as stringent temperature control, small allowable temperature gradients over very large areas included in their designs to maintain dimensional stability for large mirrors and/or optical benches, as well as optics and instruments operating at cryogenic temperatures. In addition, improvements in the development methodology of thermal control subsystems are required for scientific satellites and explorers to reduce the cost and maintain the high reliability of them. The Department of Space Flight Systems conducts fundamental and advanced academic studies related to space flight systems. Basic studies on thermal engineering and research and development of flight thermal control systems are important activities of the department.

For this position, we are seeking a candidate who will conduct fundamental researches on spacecraft control engineering based on unconventional ideas, which

contribute to future innovative spacecraft and space transportation systems. The candidate is also required to contribute to the scientific satellite projects such as S-JASMIN and LiteBIRD as an expert in thermal control engineering; the two require cryogenic structure, which are important requirements in the future astronomic satellites. In addition, the candidate is expected to have a clear image of future space engineering 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 space science projects in a higher position, an Associate Professor position (Full-time/Retirement age of 63) at ISAS will be tenured (See below for details).

Responsibilities include (but are not limited to):

- Contribute to the scientific satellite projects, such as S-JASMINE and LiteBIRD, which require cryogenic structure, as a specialist in spacecraft thermal control engineering;
- Research and operate thermal test facilities in ISAS, as a specialist in spacecraft thermal control engineering;
- Conduct fundamental researches on thermal control engineering which contribute to future innovative spacecraft and space transportation systems, based on unconventional ideas; and
- Promote collaboration with researchers from other universities and engage in teaching and directing graduate students, based on the understanding that JAXA/ISAS acts as an inter-university research system.

Required qualifications include:

- Experience in research in the field of thermal control engineering, and achievements that are highly evaluated both in Japan and worldwide;
- Be ready to expand the scope of her/his own research in the future space science; and
- Ability to teach and direct 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 Sagami-hara 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, 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 (impact factors or numbers of quotations shall be specified)

(4) Summary of previous research and outline of future research plan (including contribution to projects and ambitions for educational activities. The three items expected to 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, type of investigator (principal or co-investigator) shall be specified)

(6) If the applicant is recommended by others, the names, institutions, and contact information (telephone number and email address) of two people who can submit a necessary letter of recommendation. If the applicant recommends himself/herself, the names, institutions, and contact information (telephone number and email address) of two people who can submit a reference letter.

(7) Photocopies of major research papers or other publications (within three papers) published in refereed academic journals

※ The following documents must be submitted only by residents of the European Economic Area (EU).

(8) Consent form for handling personal information based on GDPR (Form NO.1)

Download the form from the website listed in “14. Submission”.

### 14. Submission:

Submit the application through the following website

<https://isas-appli-form.jaxa.jp/forms1/1582074053>

Follow 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:

May 15, 2020, 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 too 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 Institute of Space and Astronautical Science, JAXA

Prof. Eiichi SATO

Director of Department of Space Flight Systems

Tel: +81-50-3362-2469, E-mail: [sato@isas.jaxa.jp](mailto:sato@isas.jaxa.jp)

For inquiries regarding Application Submission in Section 14:

Management and Integration Department

Human Resources Section

Tel: +81-42-759-8440, E-mail: [ISAS-JINJI@jaxa.jp](mailto: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, 2021, he or she is required 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/english/e-le/index.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.

#### ※<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](mailto: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.