Announcement of Opportunity for an Associate Professor Position

at the Institute of Space and Astronautical Science, the Japan Aerospace Exploration Agency

The Japan Aerospace Exploration Agency (JAXA) is seeking to recruit an associate professor with a profile as described below. We widely call for recommendations and encourage applications of qualified candidates.

1. Title and Number of Position(s)

One Associate Professor (Academic Staff)

2. Department

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

3. Summary of Position (Duties and Required Abilities)

To realize more sophisticated space science mission to explore further or to observe deeper under many resource constraints, the Department of Space Flight Systems, ISAS is promoting researches on lightweight and highly functional structures for space. We have been conducting research based on structural engineering and their control and dynamics on flexible deployable structures, such as membrane structures like small solar power-sail IKAROS and variable shaped panel structures like lightweight thin-film solar cell paddles.

To advance R&D of flexible deployable structures and utilizing them in space science and exploration missions in ways of achieving dramatically high acceleration in the outer region of the solar system by solar power sails, performing interference observation with sufficient baseline length using variable shaped panels and membrane antennae, and realizing significant weight reduction of solar cell paddles by arranging thin-film solar cells in deployable membrane structures; it is indispensable to correctly grasp the deployment behavior of membrane structures and variable shaped panel structures, and their post-deployment shape and orientation, as well as researches on proper control and dynamics, high reliability of in-orbit deployment and storage, and structural design theory to achieve high rigidity and high shape stability after deployment.

The associate professor recruited this time shall promote research useful for future space science based on his/her originality on flexible deployable structures, as well as strongly contribute to the current space science projects showing his/her expertise on flexible deployable structures (structure or control and dynamics).

To carry out the above duties, the associate professor must meet at least the following conditions.

• Having research experience on flexible deployable structures in structural engineering or control and dynamics engineering and having an excellent track record of being evaluated in Japan and overseas.

- Having a track record or future potential of forming a community at the forefront to carry out innovative research in aerospace engineering, which is comprehensive engineering.
- Demonstrating leadership and having the knowledge and ability to collaborate with related subsystems through the technical development of flexible deployable structures in various projects, from the standpoint of structural engineering or control and dynamics engineering.
- Having the ability to cooperate with international cooperation partners and demonstrate leadership in international space science missions.
- Having the ability to educate and instruct graduate students.

ISAS/JAXA functions as a hub for the space science activities in Japan. While ISAS is a science institute of Japanese space agency JAXA, it is also embedded in the collaboration network among Japanese universities. Flight projects are the keys to promoting space science. In the network, ISAS, teaming up with other JAXA members as well as academic members outside JAXA, plays the special role of materializing flight projects. Thus, ISAS members are expected to play vital roles in running the projects.

We are looking for a highly motivated staff who can carry out his/her academic research in a projectoriented style, in collaboration with university researchers under the inter-university framework. Active participation to various JAXA projects and R&Ds to demonstrate his/her academic expertise is also expected. Human resource development for future space development and utilization is anticipated as natural outcome of the above-mentioned activities.

- 4. Terms and Conditions
- (1) Salary will be determined under the provision of JAXA wage rules and regulations, taking into account ability and experience.
- (2) Working days: Monday Friday, except Japanese national holidays, year-end and New-Year holidays, annual vacation, WLB(Work Life Balance) annual leave, celebration or condolence leave, maternity leave, child-care leave, care leave, nursing leave, volunteer activities, etc.
- (3) Office hours: 9:30-17:45, in principle, with a recess from 12:15 to 13:00 (however, a discretionary labor system is applied).
- (4) Overtime work: may be required (however, a discretionary labor system is applied, and working hours per day are regarded as 7.5 hours).
- (5) Duty location: JAXA Sagamihara campus (ISAS), Kanagawa, Japan.
- (6) Employment Status: Full-time/Retirement age is 63.
- (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.

5. Eligibility

PhD degree is required.

6. Commencement of Assignment

At the earliest possible date after selection. Some coordination might be needed according to JAXA's budget situation.

- 7. Application Documents
- (1) Curriculum vitae
- (2) Research career
- (3) Summary of previous research
- (4) List of research achievements
- (5) Outline of future research plan (Including contribution to projects and ambitions for educational activities)
- (6) List of awarded research funds through competition (type of funds, amount, principal investigator or co-investigator)
- (7) Contact information of two referees (names, addresses, telephone numbers, and e- mail addresses for a direct inquiry from JAXA).
- (8) Photocopies of major research papers (less than five) published in refereed academic journals

XIf you are a resident of the European Economic Area (the EU zone), you are required to submit the following document as well.

- (9) Consent form for handling personal information based on GDPR (Form NO.1) Download the form from the website listed in "8. Submission"
- 8. Submission

Submit the application through the following website

https://isas-appli-form.jaxa.jp/forms1/1605252671

When submitting the documents, please follow the instructions given on the website. All of the files to be uploaded shall be in pdf format. Note that documents (2) to (6) should 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.

9. Application Deadline

Friday, January 22, 2021, noon (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 be careful with regard to this.

10. Contact at the Institute of Space and Astronautical Science, JAXA

Director of Department of Space Flight Systems: Prof. Toru Shimada Tel: +81-50-3362-2695 E-mail: shimada.toru@jaxa.jp

For inquiries regarding Application Submission in Section 8: Management and Integration Department Human Resources Section E-mail: ISAS-JINJI@ml.jaxa.jp

11. Other Remarks

Screening will be conducted by the Advisory Council for Research and Management of ISAS, JAXA. 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.