Announcement of Opportunity for a 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 a professor with a profile as described below. We widely call for recommendations and encourage applications of qualified candidates.

- Title and Number of Position(s) One 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)

The Institute of Space and Astronautical Science (ISAS) is promoting the realization of more flexible access to space by conducting research and development of space vehicles such as launch rockets, artificial satellites, planetary exploration spacecrafts, and ground systems, as well as conducting space science projects that integrate science and engineering under inter-university research cooperation. To realize those goals, the Department of Space Flight Systems conducts R&Ds on chemical propulsion for new space transportation and exploration. Because there are various types of chemical propulsion systems, including solid / liquid rockets, hybrid rockets, air breathers, and spacecraft thrusters, ISAS has been promoted research on propellant technologies such as solid propellant, low-toxicity propellant, and hydrogen fuel. In recent years, ISAS receives increasing expectations from energy industry for various technologies related to hydrogen energy engineering (storage, transportation, and utilization of hydrogen fuel). By coupling ISAS's hydrogen technology with safety engineering for the public in the energy industry, it is possible to realize further innovation in the space transportation system represented by reusable rockets while meeting the needs of the industry. So, it is highly desired to develop new research field that combines the conventional space propulsion engineering and the safety engineering derived from energy industry.

The professor recruited this time, therefore, shall lead cross-disciplinary research on chemical propulsion including hydrogen fuel and safety engineering, and actively participate and contribute to ongoing and planned space science missions of ISAS/JAXA by adapting his/her expertise on chemical propulsion.

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. In addition, we assume that the staff can promote industry-academia joint R&Ds in collaboration with related companies.

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

- Having research experience on chemical propulsion engineering for the space transportation system with hydrogen propellant and having an excellent track record of being evaluated in Japan and overseas.
- Having strong motivation to develop a new research field that combine hydrogen energy engineering and safety engineering in cooperation with other universities and companies.
- Demonstrating leadership and having the knowledge and ability to collaborate with related subsystems through the technical development of chemical propulsion systems in various projects.
- 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.
- 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, affiliation, telephone numbers, and e- mail addresses for a direct inquiry from JAXA).
- (8) Photocopies of major research papers (up to 5) published in refereed academic journals

* If 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/forms1/1624859391

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

9. Application Deadline

September 15, 2021, 9:30AM (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.

 Contact at the Institute of Space and Astronautical Science, JAXA Director of Department of Space Flight Systems Prof. Shujiro Sawai E-mail: sawai.shujiro@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.

Personnel who transfer from National University Corporation, etc.* (hereinafter referred to as "previous position") to JAXA Educational Employee will be treated under the following contents. However, personnel who have received his/her retirement allowance (including the equivalent payment) is excluded.

* National University Corporation, Inter-University Research Institute Corporation, National Institute of Technology, National Institution for Academic Degrees and Quality Enhancement of Higher Education, and National Center for University Entrance Examinations.

- 1. Period of Employment concerning Year-End Allowance Employment period to the previous position will be added up to the tenure as a JAXA Educational Employee.
- 2. Regional Adjustment Allowance Guarantee Regional adjustment allowance is guaranteed based on JAXA's regulations, considering the work location on the day before the starting day at JAXA, in case of necessity.
- 3. Payment Requirements for Business Bachelor Allowance Allowance may be paid for those who is continuingly a business bachelor from the previous position, only in case of fulfilling the requirements based on JAXA's regulation.
- 4. Days of Annual Leave

Remaining days and time of the annual leave from the previous position will be taken over. Therefore, JAXA will need the acquired results of annual leave at the previous position.