

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.

1. Title and Number of Position

One Professor (Academic Staff)

2. Department

Department of Spacecraft Engineering, Institute of Space and Astronautical Science (ISAS)

3. Summary of Position (Duties and Required Abilities)

With the aim of empirically elucidating the origin and evolution of our solar system, the Institute of Space and Astronautical Science (ISAS) promotes the exploration of celestial bodies through a fusion of space science and space engineering and through further enhancement of cooperative university utilization. We programmatically implement multiple solar system exploration projects and provide fundamental technologies necessary for realizing projects in the current age of space discovery, strategically utilizing micro-spacecraft under severe resource constraints. One example is technologies for radio-based spacecraft tracking and trajectory setting.

Tracking and trajectory determination technologies for deep-space probes are composite technologies involving timing systems, high-frequency radio systems, radio-wave propagation, calculations for orbital mechanics, and so forth in both ground and space-borne systems. In the future, it may become necessary to use optical signals or to support autonomous spacecraft navigation at very long distances. Due to the nature of operating spacecraft in deep space, cooperation with overseas tracking networks is also essential. At ISAS, we seek human resources who will perform research in the field of trajectory determination, leading research while strengthening international cooperation for high-precision trajectory determination technologies that will enable flexible missions for a deep-space fleet.

We are seeking professors who will follow their own ideas to perform basic research on trajectory determination technologies in deep-space exploration projects, taking a leading role in collaboration with community researchers and engineers on high-precision trajectory determination technologies that will be required in future deep-space exploration projects. Those hired will also participate in deep-space exploration projects that ISAS will conduct in the future, actively contributing as experts in tracking and trajectory determination technologies.

In view of the above-described job duties, applicants for the position of professor should, at a minimum, meet the following conditions:

- Have research or practical experience in the field of deep-space tracking and trajectory determination, with demonstrable achievements in Japan and internationally.
- Have the motivation and ability to collaborate with other universities and companies while leading the development of exceptional technologies (including both hardware and software) for realizing highly accurate trajectory determinations in future deep-space projects.
- Have the motivation and ability to lead the proposal and expanded maintenance of infrastructure that conforms to the new technologies described above while maintaining compatibility with existing ground systems and their operational systems.
- Be capable of teaching and directing 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 project-oriented 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 Sagami-hara 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/forms1/1630648131>

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

November 16th, 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 too 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 Department of Spacecraft Engineering:

Prof. Takahide Mizuno

E-mail: mizuno.takahide@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.