Application Guideline for academic staff Position
at the Institute of Space and Astronautical Science, JAXA

1.	Position	Assistant Professor
2.	Number of Positions	One
3.	Affiliation	Department of Space Flight Systems, Institute of Space and Astronautical Science (ISAS)
4.	Work Location	JAXA Sagamihara Campus (3-1-1 Yoshinodai, Chuo-ku, Sagamihara, Kanagawa, JAPAN) <Scope of changes> Locations determined by the agency in the case of changes due to personnel transfers, organizational restructuring, etc. When telework is performed according to the organization's rules, its location is also included.
5.	Starting Date	April 1st, 2026 or the earliest possible date thereafter
6.	Term of Employment	Non fixed term
7.	Term of Probationary	6 months from the date of hire
8.	Job Duties	Academic research in the engineering field related to flight dynamics for space transportation systems
9.	Detailed Job Duties and Desired Candidate Profile	ISAS/JAXA is broadly promoting space science and exploration as part of advanced space science research, including research on space transportation systems aiming to secure more flexible access to space and as well as landing exploration missions to gravity planets with atmospheres such as Mars. Among these efforts, we are advancing research on a new space transportation system to achieve high-frequency access to space and large-scale transportation. In order to build a reusable system that can efficiently make repeated transportation between the earth and space, it is necessary not only to improve operational efficiency and durability but also to drastically enhance the system's flight performance. It is recognized that achieving this requires an innovative space transportation system that is clearly differentiated from existing reusable systems. For example, space transportation using an air-breather, which combines acceleration by an air breathing engine whose propulsion performance is significantly higher than that of rocket engines, with improved operability through compact vehicle design, is expected. In other words, acquiring new engine technology is key to innovating space transportation systems, but in order to establish the transport vehicle as a system, not only innovation in engine technology but also new flight dynamics technology to effectively utilize that engine are needed. In utilizing air-breathers, it is essential to build systems through approaches involving both flight dynamics and system design, such as optimizing flight trajectories during launch and return flights considering their characteristics, and enhancing the performance of air-assisted propulsion systems by combining them with rocket engines. Moreover, the research results in flight dynamics from low speeds to hypersonic speeds, considering the characteristics of this air-breather, are also expected to be applied to common issues in atmospheres other than Earth's, such as guidance to landing points by lift flight and takeoff ascent from celestial body surfaces, in exploration missions of gravity planets like Mars. Based on the above recognition, ISAS is engaged in research and development of air-breathing engines and technologies to achieve high-frequency repeated operation using them, conducting flight demonstration studies on a small

		testbed. To acquire the technologies necessary for building innovative space transportation systems and to create pioneering space science achievements, it is essential to promote practical research and development through flight dynamics and system design that consider the characteristics of new propulsion systems. Responsibilities include (but are not limited to) : ● To promote research and development of flight dynamics and system design for reusable space transportation systems, considering the characteristics of new propulsion systems such as air-breathers. ● To actively contribute as a flight dynamics researcher in the research and development of space transportation systems under development or proposed, such as flight demonstrations using experimental vehicles. Furthermore, we are looking for a highly motivated candidate 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. We also hope for human resource who can promote joint research in collaboration with related companies as needed. To fulfill these duties, the successful candidate of the Assistant Professor needs to satisfy, at minimum, the following conditions. ● Have research or practical experience in flight dynamics of space transportation systems or flight experiments, and have achievements that are highly evaluated both in Japan and worldwide. ● Have the ability and willingness to promote research and to provide leadership on flight dynamics applicable to future space science projects. ● Have the ability and willingness to actively engage in the activities required for space science project execution, not limited to his/her specialized field. ● Be capable of teaching and directing graduate students. <Scope of changes> Scope of job defined by the agency.
10.	Goal Setting	The assistant professor is expected to become an indispensable researcher for space science in general, by making important contributions to the promotion of various projects without being confined to their own areas of expertise. Based on these expectations, the candidate is required to state their own goal in the document "(5) Future research plan". The Research Director of Space Flight Systems will discuss their career path together, considering the overall achievements during about 5 years after being employed.
11.	Benefits and Conditions	(1) Salary Salary will be determined under the provision of JAXA wage rules and regulations, considering qualifications and experience. (2) Working Hours In principle, the Discretionary Labor System for Professional Work shall be applied. Working hours are basically from 9:30-17:45. The break time shall be 45minutes if the working hours per day exceed 6 hours, and 1 hour if the

		working hours exceed 8 hours. Regardless of the above, those who apply the Discretionary Labor System for Professional Work shall have deemed working hours of 7 hours and 45 minutes per day. Overtime work may be required depending on the work situation. (3) Holidays Saturdays and Sundays, National Holidays, New Year Holidays (December 29th - January 3rd), others when JAXA deems it necessary, etc. (4) Vacations and Leave Paid Annual leave, WLB (Work Life Balance) annual leave, celebration or condolence leave, maternity leave, child-care leave, care leave, nursing leave, etc. (5) Retirement Age Retirement age is 65. (6) Accommodations Depending on business necessity, individual situation, and vacancy status, either single or family accommodation will be provided, or a housing allowance will be issued according to the agency's regulations. However, the period of availability for the same housing is limited to 7 years.. (7) Social insurance Several types of social insurances (health insurance, pension plan, etc.) will be provided.
12.	Research Funding	Research funding is determined according to the budget situation of each year. *FY2025: Professor; ¥800,000, Associate professor; ¥800,000, Assistant professor; ¥400,000
13.	Required Qualifications	PhD degree in Engineering or relevant fields
14.	Application Documents	(1) Curriculum vitae (2) Research history and summary (3) List of published papers (with DOIs) (4) List of awarded research funds through competition. Specify a type of funds, amount, and a role (e.g. principal investigator/co-investigator) (5) Future research plan (including contribution to projects and ambitions for educational activities) (6) Declaration of past criminal penalties, administrative penalties, disciplinary measures, etc., including sexual harassment, assault and violence (Disclose all penalties on freeform, can also be stated in (1) CV.) (7) Names, affiliations and contact details (phone numbers and email addresses) of two individuals who can provide opinion about the candidate. (8) Copies of major research papers (up to 5) published in peer-reviewed or refereed academic journals
15.	Submission	Applicants are required to apply via the following website. Please access the application form at the following URL: https://isas-appli-form.jaxa.jp/forms1/1756787139 (Notes) ・ All the documents must be submitted in pdf format. ・ Note that documents (2) to (6) should be merged into one PDF file. ・ Application delivered in person or by mail shall not be accepted.
16.	Application Deadline	November 5th, 2025, noon (JST) ・Data entry and submission of all the required documents must be

		completed by this deadline through the website.
17.	Screening Method	Screening will be conducted by the Advisory Council for Research and Management of ISAS, JAXA. The council will conduct a document screening, and interview those who have passed the document screening. This process is subject to change.
18.	Contact Information	Director of Department of Space Flight Systems Prof. Satoshi Nonaka Email: nonaka.satoshi [at]jaxa.jp * For inquiries regarding application submission as in Section 15: Human Resources Section / Management and Integration Department E-mail: ISAS-JINJI [at]ml.jaxa.jp * *Please replace [at] in the email address with @.
19.	Name of Recruiter	Japan Aerospace Exploration Agency（JAXA）
20.	Others	(1) Information submitted in your application documents will not be used for any purpose other than the employment selection. Once the selection process is complete, we will securely dispose of all application documents and personal information, except for those submitted by the successful candidate. (2) In order to properly implement security export control based on Japan's Foreign Exchange and Foreign Exchange Act, it is necessary to submit a declaration pertaining to "Specific category" regulated by the act. Depending on the contents of the declaration, necessary adjustment for appropriate duties such as scope of secondary careers could be made. (3) Please also check the notes on JAXA website* before applying. * https://global.jaxa.jp/about/employ/index.html