

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

1.	Position	Professor (Academic Staff)
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	June 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 high-speed aerodynamics for landing exploration missions to gravity planets
9.	Detailed Job Duties and Desired Candidate Profile	ISAS/JAXA is actively promoting solar system exploration, including deep space sample return missions and landing exploration missions to atmospheric, gravity-bound celestial bodies. To realize these future missions, the atmospheric-entry and atmospheric deceleration technology is indispensable, and the advancement of high-speed aerodynamics is necessary. Especially, to further advance the deep space sample return missions, where Japan is leading the world, it is essential to evolve the ultra-high-speed sample return capsule technology realized by Hayabusa, Hayabusa2 and MMX—achieving even higher reentry speed and weight reduction. And, to execute the Japan's leading Mars landing exploration, it is necessary to acquire the efficient atmospheric entry and aerodynamic deceleration technology for Mars atmosphere with entirely different characteristics from Earth's. Furthermore, to achieve pinpoint atmospheric entry, descent, and landing at the target location on the Martian surface, the prediction of aerodynamic characteristics across a wide range of flight conditions and the active trajectory control through aerodynamic guidance during flight are required. Additionally, for insertion into planetary orbit, significant innovation in the spacecraft's resources is anticipated by utilizing aerocapture to decelerate using the planet's atmosphere, instead of propulsion systems for deceleration as in the past. To achieve these goals, a new approach based on high-speed aerodynamics is key. This involves leveraging the heritage of re-entry capsule technology into Earth's

atmosphere, realized by Hayabusa, Hayabusa2 and MMX mission, while introducing next-generation technologies based on new concepts and implementing them in actual missions.

Based on above recognition, ISAS has been engaged in research and development of advanced atmospheric entry and aerodynamic deceleration technologies, including ultra-high-speed reentry capsules using high heat resistance and lightweight heat shield and Martian atmospheric entry system using inflatable aeroshell technology with low-mass and large aerodynamic area, in order to achieve cutting-edge space science missions. To acquire efficient and accurate atmospheric entry and aerodynamic deceleration technologies for planetary atmospheres and to establish new atmospheric entry systems to achieve these, it is required to strongly lead the research field concerning planetary atmospheric entry, engaging high-speed aerodynamics research considering the characteristics of that system and practical research and development through system design and flight experiments.

Responsibilities include (but are not limited to) :

- To promote innovative and advanced research in high-speed aerodynamics that contributes to future space science missions,
- To strongly lead project teams from the perspective of a high-speed aerodynamics researcher in multiple space science exploration programs.

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 Professor needs to satisfy, at minimum, the following conditions.

- Have practical experience of flight experiments in high-speed aerodynamics, 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 for landing exploration to gravity planets with atmospheres. ● 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.	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 45 minutes 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 a deemed working hour of 7 hours and 45minutes 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) Vacation 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.
11.	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
12.	Required Qualifications	PhD degree in Engineering or relevant fields
13.	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 funding, amount, and a role (e.g. principal investigator/co-investigator) (5) Future research plan (including contribution to the JAXA projects and commitment to 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
14.	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/forms1/1761547161 (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.
15.	Application Deadline	January 14th, 2026, noon (JST) • Data entry and submission of all the required documents must be completed by this deadline through the website.
16.	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.

17.	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 14: Human Resources Section / Management and Integration Department E-mail: ISAS-JINJI [at]ml.jaxa.jp * *Please replace [at] in the email address with @.
18.	Name of Recruiter	Japan Aerospace Exploration Agency (JAXA)
19.	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