

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 Sagami-hara Campus (3-1-1 Yoshinodai, Chuo-ku, Sagami-hara, Kanagawa, JAPAN)
5.	Starting Date	October 1st, 2024 or the earliest possible date thereafter
6.	Term of Employment	Non fixed term
7.	Term of Probationary	First 6 months from the date of hire
8.	Job	Academic research on space flight systems including propulsion for spacecraft
9.	Job Details and Responsibilities	<p>ISAS/JAXA is conducting and planning a wide variety of space science missions including space telescopes, space interferometers, and deep space explores to uncover the evolution of the universe, the solar system, and the birth of life on Earth. To realize these space science missions, it is important to improve space propulsion system, which account for a significant percentage of spacecraft mass.</p> <p>In past decades, innovative space missions were achieved by solar electric propulsions such as high specific impulse ion thrusters and hall thrusters. Also, chemical thrusters realized orbit insertion to or landing on celestial bodies. Throughout the development and the operation of the flight models of thruster system, ISAS has been faced technical difficulties and thus, lessons learned have been accumulated.</p> <p>To get over this situation, ISAS has been promoting the research activity on advanced space propulsion systems. The expertise is not only in the field of chemical or electric propulsion, but also novel thruster technologies, such as nuclear propulsion and plasma sail technologies, ionic liquid propellant thrusters.</p> <p>It is expected for the applicant to research and develop reliable and high-performance novel propulsion to realize future missions, for example, asteroid probes, out-of-ecliptic-plane probes, and solar sail to outer planet. It is also expected to propose novel space missions.</p> <p>Responsibilities include (but are not limited to):</p> <ul style="list-style-type: none"> • To promote research based on expertise and free ideas in electric propulsion or/and chemical propulsion for the innovation of space propulsion system. • To actively contribute to ongoing exploration missions and space science missions as an expert of space propulsion. <p>Furthermore, we are looking for a highly motivated candidate who can carry out their 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 their 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.</p>

		<p>To fulfill these duties, the successful candidate of the Assistant Professor needs to satisfy, at minimum, the following conditions.</p> <ul style="list-style-type: none"> • Have research experiences in the field of electric propulsion or chemical propulsion and have achievements that are highly evaluated worldwide. • Have the ability and willingness to promote research and to provide leadership on space propulsion to future space science missions. • Have the ability and willingness to actively engage in the activities required for space science project execution, not limited to their specialized field. • Be capable of teaching and supervising graduate students.
10.	Goal Setting	<p>The assistant professor must make important contributions to the promotion of various projects, not only in their own specialized field, and to become an indispensable researcher for space science in general. Based on these expectations, the candidate is required to describe their own goal in the document “(5) Future research plan”.</p> <p>The Research Director of the Space Flight Systems will discuss their career path together, considering the overall achievements during about 5 years after being employed.</p>
11.	Working Conditions	<p>(1) Salary Salary will be determined under the provision of JAXA wage rules and regulations, considering qualifications and experience.</p> <p>(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 a deemed working time of 7 hours and 45 minutes per day. Overtime work may be required depending on the work situation.</p> <p>(3) Holidays Saturdays and Sundays, National Holidays, New Year Holidays (December 29th - January 3rd), others when JAXA deems it necessary, etc.</p> <p>(4) Vacations and Leave Annual vacation, WLB (Work Life Balance) annual leave, celebration or condolence leave, maternity leave, child-care leave, care leave, nursing leave, etc.</p> <p>(5) Retirement Age Retirement age is 65. (The mandatory retirement age for FY2023 and FY2024 will be 64 years old, and there will be a re-employment system until the age of 65 is reached.)</p> <p>(6) 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.</p> <p>(7) Social insurance Social insurances (health insurance, pension plan, etc.) will be provided in full.</p>
12.	Research Funding	<p>Research funding is determined according to the budget situation of each year.</p>

		*FY2023: Professor; ¥800,000, Associate professor; ¥800,000, Assistant professor; ¥400,000
13.	Required Qualifications	PhD degree in Engineering or relevant fields
14.	Application Documents	<p>(1) Curriculum vitae (2) Research history and summary (3) List of published papers (with DOIs) (4) List of awarded research funds through competition (type of funds, amount, and principal investigator/co-investigator) (5) Future research plan (including contribution to projects and ambitions for educational activities) (6) Names of two references with complete address and contact information (affiliation, telephone numbers, and e-mail addresses for a direct inquiry from JAXA). (7) Photocopies of major research papers (up to 5) published in peer-reviewed or refereed academic journals</p> <p>*If you are a resident of the European Economic Area (the EU zone), you are required to submit the following document as well. (8) Consent form for handling personal information based on GDPR (Form No. 1)</p> <p>Download the form from the website listed in “15. Submission”</p>
15.	Submission	<p>Applicants are required to apply via the following website. Please access the application form at the following URL: https://isas-appli-form.jaxa.jp/forms1/1711592953 (Notes)</p> <ul style="list-style-type: none"> • All the files shall be in pdf format. • Note that documents (2) to (5) should be merged into one PDF file. • Application delivered in person or by mail shall not be accepted.
16.	Application Deadline	<p>June 4th, 2024, noon (JST)</p> <ul style="list-style-type: none"> • Data entry and submission of all the required documents must be completed by this deadline through the website.
17.	Screening	<p>Screening will be conducted by the Advisory Council for Research 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.</p>
18.	Contact Information	<p>Director of Department of Space Flight Systems Prof. Shujiro Sawai Email: sawai.shujiro[at]jaxa.jp *</p> <p>For inquiries regarding Application Submission in Section 15: Management and Integration Department Human Resources Section E-mail: ISAS-JINJI [at]ml.jaxa.jp *</p> <p>*Please replace [at] in the email address with @.</p>
19.	Name of Recruiter	Japan Aerospace Exploration Agency (JAXA)
20.	Others	<p>(1) Information submitted in your application documents will not be used for any purpose other than the selection process and for contacting you with necessary notices in connection with the 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.</p> <p>(2) Please also check the notes on JAXA HP* before applying. * https://global.jaxa.jp/about/employ/index.html</p>