

Job Announcement for  
Professor Position (full time) at  
Institute of Space and Astronautical Science,  
Japan Aerospace Exploration Agency

Japan Aerospace Space Exploration Agency (JAXA) is seeking to recruit a professor as described below. We widely call for recommendations and applications.

1. Title and Number of Position(s)  
One Professor

2. Department  
Department of Space Flight Systems, Institute of Space and Astronautical Science, JAXA

3. Summary of Position (Duties and Required Abilities)

Future space science missions currently being envisioned such as space observations, solar system explorations, and space transportation systems will require far greater requirements than those available at present; including more sensitive measurements, greater pointing accuracy, the ability to operate in more challenging environments, aircraft-like turn-around operations, and other capabilities. Solar system explorers require operation capability in extremely challenging thermal environments as well as tight thermal control with minimal spacecraft resources. Space observation satellites require high-level and special temperature control such as stringent temperature control, small allowable temperature gradients over very large areas included in their designs to maintain dimensional stability for large mirrors and/or optical benches, as well as optics and instruments operating at deep cryogenic temperatures. Future space transportation vehicles require the reuse of cryogenic propulsion systems. It is quite impossible to meet these requirements with existing technologies, and the requirements have to be met not only by introducing high-performance thermal control technologies but as “a system.” In addition, improvements in the development methodology of thermal control subsystems are required for scientific satellites and explorers.

The principal objective of the Department of Space Flight Systems is to contribute to space science projects by conducting academic studies in multiple disciplines in the diversified research fields related to space flight systems. Basic studies on thermal engineering and research and development of flight thermal control systems are important activities of the department.

Responsibilities include (but are not limited to):

- Perform highly creative basic research on thermal engineering for future innovative spacecraft systems and future innovative space transportation systems;
- Provide strong leadership in the research and development of thermal engineering in order to achieve the above-mentioned advanced capabilities, which are quite impossible to secure using existing technologies;

- Provide strong leadership in the satellite and explorers project teams such as BepiColombo and SPICA as a specialist in thermal system engineering; and
- Promote collaboration with researchers from other universities and engage in teaching and directing graduate students, based on the understanding that JAXA/ISAS acts as an inter-university research system.

Required qualifications include:

- Experience in research in the field of thermal engineering of spacecraft systems, and achievements that are highly evaluated both in Japan and worldwide;
- Experience in leading a community to promote innovative studies in aerospace engineering;
- Ability to take leadership of research and development activities of thermal engineering and apply them to actual space science programs and to collaborate technically with other subsystems of the programs; and
- Ability to teach and direct 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, paid vacation, summer vacation, 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 will be provided in full.

#### 5. Eligibility

PhD degree is required.

#### 6. Commencement of Assignment

At the earliest possible date after selection. Basically from the first day of a month during Japanese FY2016.

#### 7. Application Documents

Submit one copy each of the following:

- (1) Curriculum vitae
- (2) Research career
- (3) Summary of previous researches
- (4) List of research achievements, including published papers and other publications (impact factors shall be specified).

- (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, addresses, telephone numbers, and e-mail addresses for a direct inquiry from JAXA). If you are recommended by others, please provide two letters of recommendation.
- (8) Photocopies of major research papers or other publications

#### 8. Submission

Submit the application through the following web-site

<https://isas-appli-form.jaxa.jp/forms1/1465956117>

following the instructions on the web.

The files shall be in pdf format, especially, documents (2) to (6) shall be merged into one pdf file.

Referees are going to be asked to upload their recommendation directly on the web.

Application delivered neither personally nor by mail shall be accepted.

#### 9. Application Deadline

September 1, 2016, 9:30 (JST).

#### 10. Contact at the Department of Space Flight Systems

Prof. Eiichi Sato

Director

Department of Space Flight Systems

Institute of Space and Astronautical Science, JAXA

Tel: +81-50-3362-2469 E-mail: [sato@isas.jaxa.jp](mailto:sato@isas.jaxa.jp)

Contact at Management and Integration Department

Human Resources Section

Fax: +81-42-759-8440 E-mail : [ISAS-JINJI@jaxa.jp](mailto:ISAS-JINJI@jaxa.jp)

#### 11. Other Remarks

Applications will be examined and selected by the Advisory Council for Research and Management of ISAS, JAXA. The travelling fee necessary for the examination and selection shall be 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.