



## ITYF Open Recruitment Guidelines

### 2017 JAXA International Top Young Fellowship (ITYF)

#### **2017 ITYF Open Recruitment**

JAXA is seeking talented, energetic and highly motivated employees to join the ITYF team.

#### **Purpose and Ideal Candidate:**

The Japan Aerospace Exploration Agency (JAXA) International Top Young Fellowship (ITYF) was established as a new fellowship program in 2009 with the purpose of inviting world's top-level young researchers to work at the Institute of Space and Astronautical Sciences (ISAS)/JAXA.

ITYF fellows are expected to contribute to the following activities in ISAS/JAXA in addition to producing outstanding academic achievements in their areas of specialization.

- Active interaction with researchers inside and/or outside ISAS to create new academic trends.
- Active participation or initiative in planning new space science mission projects.
- Active participation in developing research networks of ISAS and the related foreign institutes.

We also expect positive impact of ITYF fellow's activities on ISAS researchers and students.

**Areas of Specialization:** ISAS consists of five research departments, namely, Department of Space Astronomy and Astrophysics, Department of Solar System Sciences, Department of Interdisciplinary Space Science, Department of Space Flight Systems and Department of Spacecraft Engineering. The Departments cover various areas whose research activities benefit substantially from accessing outer space. An applicant may either think of enhancing a research theme that is already dealt at ISAS or propose to set-up a new research theme that will expand the research horizon of ISAS.

Examples of possible research subjects include:

- Structure and origin of the universe
- Formation of the earth and solar system
- Utilization of the space environment for microgravity experiments
- Engineering and technology development for the exploitation of space

For reference, past ITYF fellows have conducted research on the following themes:

- Studying the sun and the heliosphere by combining observations and numerical simulations
- Observing black hole physics across the electromagnetic spectrum
- Extreme physics of relativistic jets
- Flow and emission models for different astrophysical objects
- Computational flow physics and uncertainty quantification for predictive science
- Space plasma physics & planetary science

**Eligibility:**

Applicants must have a Ph.D. or Doctoral degree in Natural Sciences or Engineering or equivalent or higher ability, and must have degrees earned within less than 8 years from the hire date (those expected to earn their degrees by the hire date are eligible to apply) .

**Terms and Conditions****1. Duration of the fellowship and commencement of research activity**

- ( 1 ) The contract period is basically three (3) years. The contract shall be concluded and renewed every Japanese fiscal year. When renewing the contract at the end of three (3) years, the period can be extended up to five (5) years from the initial hire date as a JAXA employee depending on funding and progress, only if the ITYF Steering Committee acknowledges the ITYF fellows' research achievements as distinctly excellent.
- ( 2 ) Date of Hire: April 1<sup>st</sup>, 2018 (negotiable)
- ( 3 ) Research Plan and Achievement Report
  - i) After appointment, ITYF fellows must develop a 3-year research plan in consultation with their collaborators and submit it to the ITYF Steering Committee.
  - ii) ITYF fellows must report their research achievements to the ITYF Steering Committee every fiscal year.
  - iii) ITYF fellows must submit their final reports to the ITYF Steering Committee at termination of their research (contract) term and must undergo evaluation of the Committee.

**2. Compensation Package of the Fellowship**

- ( 1 ) Type of Employment: Fixed-Term Employee (ITYF Fellow)
- ( 2 ) Salary: Monthly salary is 791,000 JPY before tax deduction (equivalent to a monthly salary of 7,190 USD at the exchange rate of 110 JPY/USD).
- ( 3 ) Research Fund: The amount of 2,500,000 JPY (equivalent to 22,727 USD at the exchange rate of 110 JPY/USD) for research and travel expenses is provided per fiscal year. ITYF fellows may also apply for competitive research funds (e.g. JSPS' Grants-in-Aid for Scientific Research)
- ( 4 ) Place of Appointment: JAXA Sagamihara Campus

- ( 5 ) Allowances: Commutation and assignment allowances are provided (if ITYF fellows meet certain requirements according to JAXA's rules)
- ( 6 ) Based on JAXA's regulations, arrangements for single or family housings can be made if considered necessary for work-related purposes. Otherwise, housing allowances will be provided (if ITYF fellows meet certain requirements according to JAXA's rules)
- ( 7 ) Working Days: Monday-Friday, except for Japanese national holidays and year-end/new-year holidays (December 29<sup>th</sup> thru January 3<sup>rd</sup>)
- ( 8 ) Annual paid leave and special leave such as maternity, bereavement and marriage leaves.
- ( 9 ) Others: Employment insurance, workers' compensation insurance, health insurance, employees' pension insurance, and corporate pension fund will be provided.

\*Terms and conditions are subject to change according to JAXA rules, applicable Japanese laws and regulations, and budget.

## **Application Procedures**

### **1. Application**

The applicant must choose a research department most closely related to his/her area of specialization from the five (5) research departments and apply online from each link. (we do not accept applications sent by post or carried in personally) The applicant may be hired by a research department other than the one applied for. The applicant may apply to multiple departments.

\* For the activities of Research Departments, Laboratories, etc in ISAS, please refer to the following URL.

<http://www.isas.jaxa.jp/en/researchers/laboratories/>

### **【Science】**

- (1) Academic research on space astronomy and astrophysics

<https://isas-appli-form.jaxa.jp/forms1/1490597745>

- (2) Academic research on solar system bodies including the sun and earth

<https://isas-appli-form.jaxa.jp/forms1/1490597752>

### 【Interdisciplinary Space Science】

- (3) Academic research on interdisciplinary areas covering multiple fields in space science and on new space science fields.

<https://isas-appli-form.jaxa.jp/forms1/1490597758>

### 【Engineering】

- (4) Academic research on space flight related engineering technology and space systems

<https://isas-appli-form.jaxa.jp/forms1/1490597763>

- (5) Academic research on spacecraft related engineering technology, ground system technology and its application

<https://isas-appli-form.jaxa.jp/forms1/1490597769>

## 2. Application Documents and Submission

The following documents must be submitted for application. All documents must be in place to be considered for selection.

- ( 1 ) Curriculum Vitae
- ( 2 ) List of research activities, including published papers and other publications
- ( 3 ) Outline of previous researches and future research plans(\*)
  - \*If there is an ISAS researcher whom you wish to be your collaborator, please specify his/her name. Likewise, if you wish to collaborate with researchers inside and/or outside ISAS, please specify their names and affiliations.
- ( 4 ) Three (3) major research papers
- ( 5 ) Three (3) reference letter with signature of referee ( \*)
  - \*Referees do not have to be JAXA/ISAS researchers
  - \*E-signatures are acceptable

Please refer to the application instructions on the websites listed above.

All files must be uploaded in pdf format.

Documents (2) and (3) should be saved in one pdf file, and (4) in one pdf file.

Document “(5) Reference letter” must be uploaded personally by the referee to the reference letter website (a request e-mail will be sent to the referee’s e-mail address submitted by the applicant).

## 3. Number of positions

A few

#### **4. Application Deadline (plan)**

Not later than 17:00 PM (**JST**) / 8:00AM (**UTC**) on Wednesday, May 31, 2017

All application documents including reference letters must be submitted by the above date. (please keep in mind that last-minute applications will leave very short time for referees to prepare reference letters)

#### **5. Selection procedures, evaluation criteria, schedule**

Selection will be done by JAXA/ITYF Steering Committee based on the following evaluation criteria. After initial screening and shortlisting candidates, shortlisted candidates will be invited for an interview (seminar presentation at ISAS/JAXA in Japan. JAXA will cover travel and accommodation expenses for the interview).

(Evaluation criteria)

##### **1 . Content of research**

- (1) Does the candidate have substantial achievements such as outstanding research results?
- (2) Can the candidate produce outstanding results through future research plans?
- (3) Can the candidate publish research papers in international academic journals and make a large number of presentations at international conferences?

##### **2 . Synergy with ISAS professors/researchers**

- (1) Can the candidate bring positive impact to ISAS'organizational activities?
- (2) Can the candidate become a leader in collaborative academic research?
- (3) Can the candidate create a new trend through joint research and/or observation with Japanese researchers?
- (4) Does the candidate have a positive impact on ISAS researchers and postgraduate students concerning human resource development?
- (5) Can the candidate contribute to proposing (incubating) attractive projects in collaboration with researchers inside and/or outside ISAS?

##### **3 . Potential**

- (1) Does the candidate have the potential of becoming a worldwide leader in his/her research area?
- (2) Does the candidate have the potential of becoming a key figure in generating collaborative efforts with ISAS on an organizational level?

#### **4 . Research departments and collaborators**

(1) Can the collaborator strongly recommend that accepting the candidate fellow in the research department will create a synergetic effect and that the long-term relationship-building between the candidate fellow and ISAS will be of full value?

(Planned schedule) \*The schedule may change depending on the situation.

- May 31<sup>th</sup>, 2017: Application deadline
- Early July, 2017: Notification of initial selection results (by e-mail)
- August, 2017 : Interview
- Early September, 2017 : Notification of interview results (by e-mail)
- April 1<sup>st</sup>, 2018 : Hire date (negotiable)

#### **General inquiries:**

E-mail address : ITYF\_ADMIN@ml.jaxa.jp

Secretariat

JAXA International Top Young Fellowship Steering Committee

ISAS/JAXA

#### **Miscellaneous**

All documents and interviews should be written or be held in English language.

#### **Use of personal information**

Personal information submitted to JAXA will not be used for any purpose other than the selection procedures of the JAXA International Young Fellowship. JAXA will handle the submitted personal information properly according to JAXA rules.

#### **Related websites**

For further information on activities of ISAS and ITYF fellows, please refer to the following websites.

<http://www.isas.jaxa.jp/e/index.shtml>

<http://www.isas.jaxa.jp/en/researchers/ityf/>

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