About Sakura Science Plan
Cultivating the Science Leaders of the Future

Countries share the future challenge of promoting research and development and transforming results into innovations. In particular, Japan is facing the urgent task of creating a global research environment in cooperating with talented personnel in Asia.

In 2014, the Japan Science and Technology Agency (JST) started the “Sakura Science Plan (SAKURA SCIENCE Exchange Program).” Since then, the program has invited talented young foreign human resources for short-term visits to Japan, giving them the opportunity to experience both Japan’s cutting-edge science and technology and culture. The program aims for contributing to the followings.

• Strengthening friendly relations between Japan and other countries and regions
• Globalization of Japan’s education and research organizations

The goal of the program is
• Promoting exchanges with talented young human resources from overseas who could contribute to the future of science and technology, such as continuous research.

The program also aims to contribute to the development of science and technology both in Japan and in the world.

During the five years from its initial year to fiscal year 2018, the program has invited 26,380 youth to Japan from 41 countries and regions. Talented young human resources took part in exchange programs at educational and research institutions in various areas all over Japan. Through this program, the participants are expected to have increased their curiosity and pursuit of scientific discovery, glowing up as future science leaders active on a global scale.

In addition, participants all become members in the “Sakura Science Club”, alumni association of Sakura Science Plan after completing the program, so their interactions with one another will continue to broaden even after they return to their home countries.
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Candidates are chosen from students in high schools, universities, graduate schools, researchers and others up to 40 years of age that have never visited Japan from 41 countries/regions*: East Asia, ASEAN member states, South Asia, Central Asia, Pacific island countries and others.

*For more details, see Page 6.

The exchange program is a short-term stay in Japan (seven days to three weeks) with a variety of courses.

Japanese organizations that may accept program participants are universities, technical colleges, high schools, local public agencies, incorporated associations and others.

JST provides receiving organizations in Japan with financial support (expenses of travel and sojourn). In case of the programs by private companies, only travel costs are provided.

### Number of invitees by country/region

(FY2014 to FY2018: 26,380)

- **Korea**: 841 (3%)
- **Mongolia**: 711 (3%)
- **Myanmar**: 975 (4%)
- **Taiwan**: 1,301 (5%)
- **Malaysia**: 1,461 (5%)
- **Indonesia**: 1,736 (7%)
- **Viet Nam**: 1,912 (7%)
- **China**: 8,904 (34%)
- **Thailand**: 2,854 (11%)
- **Others**: 3,478 (13%)

### Expansion of Sakura Science

**Number of invitees* and project budgets**

*Total number of participants in Open Application programs and JST Direct Invitation programs

(Hundred million yen) (Person)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Invitees</th>
<th>Project Budgets</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2014</td>
<td>8.10</td>
<td>2,944</td>
</tr>
<tr>
<td>FY2015</td>
<td>12.05</td>
<td>4,224</td>
</tr>
<tr>
<td>FY2016</td>
<td>15.00</td>
<td>5,519</td>
</tr>
<tr>
<td>FY2017</td>
<td>18.70</td>
<td>6,611</td>
</tr>
<tr>
<td>FY2018</td>
<td>20.70</td>
<td>7,082</td>
</tr>
</tbody>
</table>

(Unit: person)
Two Programs of SAKURA SCIENCE PLAN

Open Application Program

This Program aims:
- To promote grassroots exchanges in S&T field at Japanese organizations
- To build Global human networks in S&T
- To activate joint research and interactions among young human resources

1) Types of Open Application Program

A. Science and Technology Experience Course
   Invitees participate in activities prepared by receiving organizations of Japan (for example, visits, experiments, and discussions). (Participants stay in Japan for up to 7 days.)

B. Collaborative Research Activity Course
   Participants do joint research on clearly defined subjects at receiving organizations in Japan. (Participants stay in Japan for up to three weeks.)

C. Science and Technology Training Course
   Participants undergo intensive training at receiving organizations in Japan to learn skills and techniques in S&T fields. (Participants stay in Japan for up to 10 days.)

2) Process to Implement a Program

The program begins!

JST Direct Invitation Program

JST prepares programs and directly invites promising youngsters from foreign countries.

Programs are specially arranged by JST making the most of its network in science and technology field, and government ministries and agencies in Japan.

SAKURA SCIENCE HIGH SCHOOL PROGRAM

SAKURA SCIENCE High School Program invites excellent high school students from foreign countries to provide them with an opportunity to learn about Japan’s most advanced science and technology. For those students, various programs are prepared.

- Participate in special classes given by Nobel laureates and other famous scientists
- Visit renowned universities and research institutions in Japan
- Exchange with Japanese high school students
- Visit mother country’s embassy in Japan

A total of 4,456 high school students and supervisors from 41 countries/regions were invited to 39 courses over a five-year period from FY2014.

SAKURA SCIENCE Supporters Program aims to invite stakeholders in science and technology field from overseas, and provides a deeper understanding of Japanese administration in science, technology, and education.
3) Open Application Period

Applications can be submitted by Japanese organizations at any time during the open application period. There are several deadlines within each fiscal year. Applications submitted by each deadline will be reviewed for selection in each application period.

For the latest schedule, refer to the following: https://ssp.jst.go.jp/form/index.html (only in Japanese)

Open Application Program implemented across Japan

Activity reports of Open Application Program are introduced on the Sakura Science Plan website:

- **Exchange Program with China Pharmaceutical University at Gifu Pharmaceutical University**
  - Experiment to measure drug blood concentration
  - (October 2018)

- **Program with 3 Thai universities at High Energy Accelerator Research Organization**
  - Practice dealing with super-fluid helium
  - (September 2018)

- **Exchange with high school students from Taiwan and Singapore in Oyama-city, Tochigi Pref.**
  - Simple Robot Assembly and practice with the students from National Institute of Technology, Oyama College
  - (August 2018)

4) Track Record

For five years from FY2014, **2,237 exchange programs (from 3,137 applications)** were selected, and **21,187 of young people were invited.** The number of organizations involved in the program has been increasing year by year.

<table>
<thead>
<tr>
<th>No. of sending organizations</th>
<th>No. of receiving organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,771</td>
<td>320</td>
</tr>
</tbody>
</table>

(Total from FY2014 to FY2018)

Activity Reports

https://ssp.jst.go.jp/EN/report/nendo.html

Special programs prepared for excellent foreign youth

- **High School Program**
  - Lecture by Dr. Yoshinori Ohsumi, Nobel Laureate
  - High school at Komaba, Univ of Tsukuba
  - (April 23, 2019)

- **High School Program**
  - Chatting by Bhutanese and Japanese high school students
  - at Kanagawa Prefectural Atsugi High School
  - (April 24, 2019)

- **High School Program**
  - Lecture on Photocatalysis by Dr. Akira Fujishima (Honorary Professor at Tokyo University of Science) at Koshigayakita High School, Saitama Pref.
  - (July 10, 2019)

- **Workshop at ASEAN Science and Technology Supporters Program**
  - 26 invitees from 10 countries and ASEAN Secretariat
  - (November 8, 2018)
**Effects of Sakura Science Plan**

- In the questionnaire for invitees (in Open Application Course for FY2018), 99% were satisfied with the program, and the same percentage answered that they became more favorable toward Japan.

- The excellent students and researchers who visited Japan by SSP returned to Japan for study, research and so on. 1,554* of Sakura Science invitees returned to Japan. *Confirmed in May 2019. (except the ones who returned for sightseeing)

- The receiving organizations, such as high schools and universities, benefited from the program as follows:
  - The internationalization of the organization has been promoted.
  - The organization became better known worldwide.

- Famous scientists, including Nobel laureates, delivered lectures and workshops for participants, and various exchange activities were achieved at Japanese high schools (52 high schools participated as of July 2019). Global perspectives have been fostered in the invited youth and Japanese students. Until July 2019, over 1,700 participants joined an experimental workshop by Dr. Hideki Shirakawa, Nobel laureate.

- Sakura Science Club, an alumni association of SSP, is expanding its network by holding a regular reunion party, and communicating on its members-only official website. By June 2019, more than 27,000 members had joined Sakura Science Club.

**Remarkable effects in science and technology diplomacy**

- Sakura Science Plan gained a high reputation and support from key persons in other countries, including Xi Jinping (President of China), Narendra Modi (Prime Minister of India), and Ranil Wickremesinghe (Prime Minister of Sri Lanka).

- Due to its high appreciation of Sakura Science Plan, China holds a program to invite Japanese young officers and others to China. As Wan Gang, former Minister of Science and Technology in China expressed his intention to expand the scale of invitation, totally 436 people have been invited by June 2019.
The supporters’ network for Sakura Science Plan is expanding

Nobel laureates have been strong and influential supporters to SSP, and sharing that they expect SSP to continue for the future of science and technology in Japan and other countries.

Leo Esaki  
Nobel Prize in Physics in 1973

Susumu Tonegawa  
Nobel Prize in Physiology or Medicine in 1987

Hideki Shirakawa  
Nobel Prize in Chemistry in 2000

Ryoji Noyori  
Nobel Prize in Chemistry in 2001

Koichi Tanaka  
Nobel Prize in Chemistry in 2002

Makoto Kobayashi  
Nobel Prize in Physics in 2008

Toshihide Maskawa  
Nobel Prize in Physics in 2008

Akira Suzuki  
Nobel Prize in Chemistry in 2010

Eiichi Negishi  
Nobel Prize in Chemistry in 2010

Shinya Yamanaka  
Nobel Prize in Physiology or Medicine in 2012

Isamu Akasaki  
Nobel Prize in Physics in 2014

Hirosi Amano  
Nobel Prize in Physics in 2014

Shuji Nakamura  
Nobel Prize in Physics in 2014

Satoshi Omura  
Nobel Prize in Physiology or Medicine in 2015

Takaaki Kajita  
Nobel Prize in Physics in 2015

Yoshinori Osumi  
Nobel Prize in Physiology or Medicine in 2016

In addition, academia, industries, ambassadors in Japan from the eligible countries/regions and parliamentary associations for the friendship between Japan and the countries/regions.

41 countries/regions eligible for Sakura Science Science Plan (FY2019)

Central Asia  
Kazakhstan  
Kyrgyz  
Tajikistan  
Turkmenistan  
Uzbekistan

Southwest Asia  
Bangladesh  
Bhutan  
India  
Maldives  
Nepal  
Pakistan  
Sri Lanka

East Asia  
China  
Korea  
Mongolia  
Taiwan

Southeast Asia  
Brunei, Cambodia  
East Timor  
Indonesia  
Malaysia, Myanmar  
Philippines, Laos  
Singapore, Thailand  
Viet Nam

Pacific Island countries  
Fiji  
Marshall Islands  
Micronesia, Palau  
Papua New Guinea  
Samoa  
Solomon Islands  
Tonga

Other Regions*  
Argentina  
Brazil  
Chile  
Colombia  
Mexico  
Peru

*Implemented as trials.