About SAKURA Exchange Program in Science
A bridge to the future in Asia

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 while cooperating with talented personnel in Asia.

Started by Japan Science and Technology Agency (JST) in 2014, Japan-Asia Youth Exchange Program in Science (nicknamed “SAKURA Exchange Program in Science” or SSP) aims to invite excellent youth from Asian countries to Japan for a short period to allow them to discover Japan's state-of-the-art science and technology (S&T) and participate in exchanges with Japanese talent at universities and research institutions for the bilateral transfer of human resources and research. Young participants are expected to become future science leaders in Asia and their networks are also expected to grow.

During the four years from its initial year to fiscal year 2017, the program has invited about 19,000 youth to Japan from 35 countries and regions, including China, India, and ASEAN member states. The young Asian participants are expected to actively interact with their Japanese peers in high schools, universities, and research institutions and contribute to the future development of S&T in Asia. They also take part in Sakura Science Club, an alumni association of SSP, to keep in touch after returning home. The scope of the exchange continues to expand more and more.

Candidates are chosen from students in high schools, universities, graduate schools, and researchers up to 40 years of age that have never visited Japan from 35 countries/regions*: East Asia, ASEAN member states, South Asia, Central Asia, and Pacific island countries. For more details, see Page 6. In FY2018, other regions are going to be added.

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.

Overview of SAKURA Exchange Program in Science

Selection of talented young human resources in S&T fields

Programs implemented at receiving organizations across Japan

Visit universities and research sites

Exchange with Japanese youth and researchers

Program Sponsor

Special classes given by Nobel laureates

Exchange proposals based on the unique know-how of receiving organizations

Number of invitees and project budgets

<table>
<thead>
<tr>
<th>FY2014</th>
<th>Number of invitees</th>
<th>Project budgets</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,10</td>
<td>2,944</td>
<td>8.10</td>
</tr>
<tr>
<td>12.05</td>
<td>5,519</td>
<td>6.61</td>
</tr>
<tr>
<td>15.00</td>
<td>4,224</td>
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</tr>
<tr>
<td>18.70</td>
<td>6,611</td>
<td>6.61</td>
</tr>
</tbody>
</table>

*Total number of participants

Number of invitees by country/region (FY2014 to FY2017: 19,298)

- China: 6,611 (34.2%)
- Taiwan: 6,594 (34.2%)
- Japan: 918 (4.8%)
- Others: 3,574 (18.5%)
- Myanmar: 721 (3.7%)
- India: 1,513 (7.8%)
- Viet Nam: 1,455 (7.5%)
- Indonesia: 1,280 (6.6%)
- Malaysia: 1,148 (5.9%)
- Thailand: 2,095 (10.9%)

(Unit: person)
Invitation by SAKURA Exchange Program in Science

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Others (Unit: person)

Expansion of SSP

Number of invitees* and project budgets
*Total number of participants in Open Application Course and JST programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Project budgets (unit: hundred million yen)</th>
<th>Number of invitees (Person)</th>
</tr>
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<td>FY2014</td>
<td>8.10</td>
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SAKURA Exchange Program in Science
Two Categories of SAKURA Exchange Program

Open Application Course

This course aims:
- To promote grassroots exchanges in S&T field at Japanese organizations
- To build a human network in S&T of Asia
- To activate joint research and interactions among young human resources

1) Types of Open Application Course

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 10 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.)

*Program applications for multiple years (up to 3 fiscal years) can be submitted for each course, as well as the ones for single year.

2) Process to Implement a Program

Program preparation by Asian and Japanese organizations
Program application to JST by the Japanese organization
Program selection by the SSP selection committee
Contract conclusion by the Japanese organization and JST
Provision of expenses (travel and sojourn) by JST

The program begins!

JST Managed Program

JST prepares programs and directly invites promising youngsters from other Asian countries.

This program is 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 invites excellent high school students from other Asian countries to provide them with an opportunity to learn about Japan's most advanced science and technology. For those Asian students, various programs are prepared.

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

A total of 3,314 high school students and supervisors from 35 countries/regions were invited to 29 courses over a four-year period from FY2014.

Program for Stakeholders in Science and Technology aims to invite stakeholders in science and technology field from Asia and other countries, 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: http://ssp.jst.go.jp/form/index.html (only in Japanese)

4) Track Record

For four years from FY2014, **1,666 exchange programs (from 2,449 applications)** were selected, and **15,467** 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>
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<tbody>
<tr>
<td>1,173</td>
<td>292</td>
</tr>
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</table>

(Total from FY2014 to FY2017)

Programs for Open Application Course implemented across Japan

Activity reports of Open Application Course are introduced on the SAKURA Exchange Program in Science website: http://ssp.jst.go.jp/EN/report2018/index.html

**Kanazawa University and Tianjin University of Traditional Chinese Medicine (China)**

Exchange about Japanese kampo medicine and traditional Chinese medical science (March 2017)

**Minamata City**

Graduate school students from Thailand, Taiwan, and Singapore learned waste disposal (July 2017).

**National Institute of Advanced Industrial Science and Technology, and National Nanotechnology Center (Thailand)**

Training at Nano-Processing Facility (February 2017)

Special programs prepared for excellent youth in Asia

**High School Program**

Lecture by Dr. Toshihide Maskawa, Nobel laureate at Nagoya Koyo Senior High School (April 18, 2017)

**High School Program**

High school visit by students from India, Myanmar, Taiwan to Atsugi High School (SSH) (May 23, 2017)

**High School Program**

Indonesian high school students attended a math class led by Prof. Jin Akiyama at Tokyo Univ. of Science (April 19, 2016)

**Workshop for the ASEAN Officers Program**

Thirty-one officers were invited from 10 countries and the ASEAN secretariat. (February 13, 2017)
Success of SAKURA Exchange Program in Science

In the questionnaire for invitees (in Open Application Course for FY2016), 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 for SSP returned to Japan for study or research. In about 40% of the receiving organizations in Open Application Course, invitees returned to Japan (2016 survey).

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 (38 high schools participated as of August 2018). A global perspective has been fostered in the invited youth and Japanese students. Over 1,000 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 November 2018, more than 24,000 members had joined Sakura Science Club.

Remarkable effects in science and technology diplomacy

SAKURA Exchange Program in Science 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 Exchange Program in Science, China invited 78 Japanese people, including young officers (October 2016). Wan Gang, Minister of Science and Technology of China, expressed an intention to expand the scale of invitations during his stay in Japan (July 2017).

Japanese and Indian prime ministers emphasized the importance of SSP at the Japan-India summit meeting (November 11, 2016). (the Official Residence of the Prime Minister HP)

Wan Gang, Minister of Science and Technology of China, expressed high praise for SSP to Hirokazu Matsuno, Minister of Education, Culture, Sports, Science and Technology (July 2017).

Kazuki Okiyama, Director of SSP Promotion Office, received the Chinese International Science and Technology Collaboration Award for his contributions to SSP (January 2016).
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 Asian 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  
**Tosiohde Maskawa**, Nobel Prize in Physics in 2008  
**Osamu Shimomura**, Nobel Prize in Chemistry 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  
**Hiroshi 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 and ambassadors in Japan from the eligible countries/regions support SSP.

**35 countries/regions eligible for SAKURA Exchange Program in Science** (as of FY2017)

**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 are going to be added in FY2018.*