

JST

Japan Science and
Technology Agency

2025



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HASHIMOTO Kazuhito
President
Japan Science and Technology Agency

橋本和仁

Last year was marked by events that significantly impacted society, including heightened geopolitical tensions, numerous natural disasters, and rapid advancements in AI that spurred innovation across various fields. It was also a year that underscored the immense potential of science and technology, while sharply reminding us of our responsibility to share its benefits with society. To address these complex, emerging challenges and to achieve sustainable growth, Japan needs "new strength," which I believe will come from science and technology. As the nation's central agency for implementing STI policies, JST carries the responsibility to cultivate this "new strength" while aligning with the needs and values of society.

This year, to raise Japan's research capabilities and global presence, JST will strengthen its initiatives that promote cutting-edge research. In particular, we will prioritize supporting researchers engaged in original and ambitious projects that can lead to groundbreaking discoveries and technological breakthroughs. We will also expand our international talent circulation efforts by promoting initiatives such as ASPIRE that fosters collaborations with STI-leading countries, and NEXUS that supports joint research with ASEAN member states. A new program will be launched as well to invite young researchers from India, a country gaining recognition for its strengths in developing talent in science and engineering. We aim to enhance and accelerate cooperative efforts between Japan and India by leveraging this expertise to create initiatives that will contribute to a brighter future for both nations. JST will also continue to actively pursue and advance collaborations with other countries.

In addition, our CRONOS program, launched last year, is expected to make significant contributions not only to Japan but also to the global community. It aims to advance fundamental research, support proof-of-concept studies, develop innovative technological models, and cultivate highly skilled researchers in the ICT field.

While international collaborations are crucial for innovation, we must address research security given the current political climate and the increasing societal impact of emerging technologies. We must strike a balance between preserving scientific freedom and protecting research against risks such as technology leaks. JST will continue to work closely with academia and the government to foster an environment where cutting-edge, international collaborative research can proceed safely and effectively.

We also remain committed to strengthening the foundations of research excellence to revitalize Japan's research capabilities. Our initiatives include accelerating green transformation technology, promoting the creation of university-based startups, fostering the next generation of researchers and research management personnel, and helping universities become globally competitive research institutions through our University Fund.

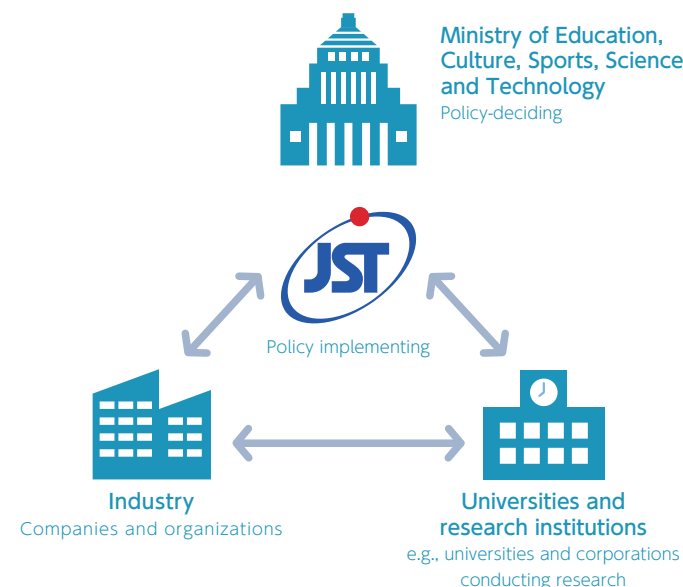
I'm confident that we can turn any challenge into an opportunity and look forward to what this year has in store for us.

About JST

JST (Japan Science and Technology Agency) is a national research and development Agency that plays a central role in the Science, Technology and Innovation Basic Plan* and aims to promote science and technology.

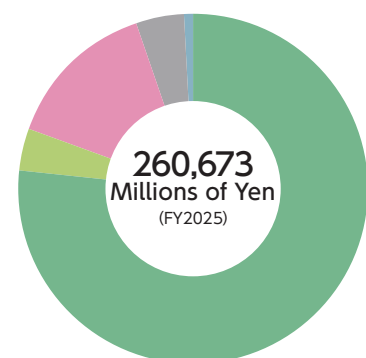
In order to promote science and technology and provide solutions to social issues, JST comprehensively implements diverse projects in collaboration with universities, research institutions, and industries in Japan and overseas, and makes contributions to the sustainable development of society and the creation of science, technology, and innovation.

* Under the Science and Technology Basic Law enacted in 1995, the government formulated the Science and Technology Basic Plan to implement systematic and consistent science and technology policies from a long-term perspective, and by formulating the first through the fifth basic plans, the government has been promoting science and technology policies. In June 2020, the Science and Technology Basic Law was revised as the Science, Technology and Innovation Basic Law, and the basic plan from FY2021 was formulated as the Science, Technology and Innovation Basic Plan.



5th Mid-to-Long term Plan (FY2022 - 2026)

Initial Budget



Funding programs 82.8%

As a network-based research institute, JST promotes research and development leading to innovation and address economic & social issues throughout the implementation of research results and International joint researches.

- Strategic Basic Research
- International Collaborations
- Industry-Academia Collaboration and Technology Transfer

R&D strategy planning 0.5%

Throughout dialogue with stakeholders and data analysis, JST formulates R&D strategies toward the future.

Public engagement 9.4%

Promoting dialogue with various stakeholders toward co-creation of a future society. JST also fosters next generations talents in the fields of S&T as well as human resources who can contribute to S&T innovation.

- Promotion of "Science in/for Society"
- Fostering the Next Generation Human Resources
- Miraikan

Information platform and database services, etc. 3.5%

Other programs 3.8%

Special Initiatives

India-Japan Circulation of Talented Youths in Science Programme (LOTUS Programme)

Support for graduate students and postdoctoral researchers from to participate in research exchanges in Japan.

<https://www.jst.go.jp/program/india/en/>



The LOTUS Programme invites and supports talented young researchers from India to participate in research exchanges in Japan. The program aims to strengthen Japan-India joint research efforts by fostering collaborations and building networks between research institutions in Japan and India. The research projects and exchanges will be jointly supervised by faculty members from both countries. This opportunity is open to young researchers joining ongoing or upcoming joint research projects between Japanese and Indian academic institutions. In addition, the program will provide career development support for those who are interested in pursuing a research career in Japan.

Eligibility Requirement	Individuals must be enrolled in a graduate program (master's or doctoral degree) or be a postdoctoral researcher at an Indian university.
Exchange Period	Up to one year maximum
Eligible Fields	(i) AI & Information Technology (ii) Biotechnology (iii) Energy (iv) Materials Science (v) Quantum Science (vi) Semiconductors (vii) Telecommunications, etc.
Application	Applications must be submitted by the Japanese counterpart of the joint research project.
Application Period	Approximately once per year

Support for Excellent International Research Universities

JST support for the universities which are selected as *Excellent International Research Universities* by MEXT. To strengthen the system of research and education and so on, JST will provide subsidies through the Japan University Fund to the selected universities.



Competitive funds

Strategic Basic Research Programs

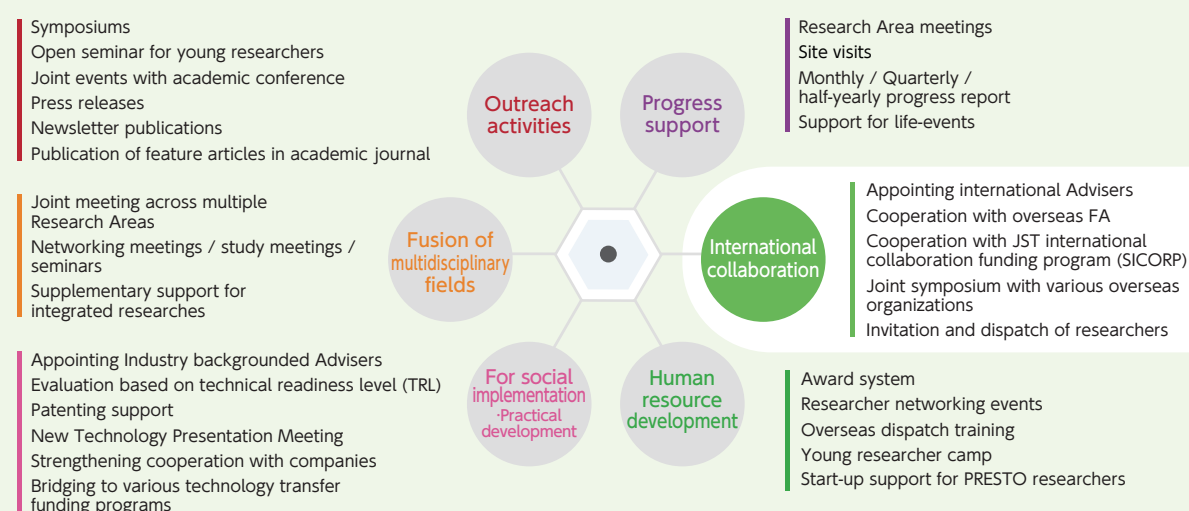
Strategic Basic Research Programs (SBRPs) are intended to advance basic research aimed at achieving solutions for key issues Japan is facing, and to produce the seeds of creative, innovative technologies from new scientific knowledge that gives rise to innovation in science and technology leading to social and economic change. As such, the SBRPs seek to build research institutes (time limited research organizations spanning organizational boundaries) consisting of networks of researchers at universities, companies, and public research institutions. Researchers pursue their work, while building networks of other researchers, industrial concerns that will benefit from the fruits of research work, and interested parties in society at large, under the leadership of a Program Officer (Research Supervisor, etc.) performing the role of the institute director.

<https://www.jst.go.jp/kisoken/en/>



To maximize the outputs

To maximize the output of the SBRPs, in accordance with the characteristics of each Research Area, extensive management is implemented and organized, including outreach activities, progress support, fusion of multidisciplinary fields, international collaboration, social implementation or practical development, and human resource development.



Concepts for International Collaboration

The programs contribute to the achievement of the Strategic Objectives set by the Ministry of Education, Culture, Sports, Science and Technology. Therefore, while paying attention to securing national interests including appropriate protection and utilization of intellectual property, we are promoting internationalization as a means of maximizing output of the programs.

- Supplementary funding to support international activities
- Joint funding with funding agencies in countries with advanced science and technology
- Invitation of overseas researchers and dispatching of domestic researchers overseas
- Selection of Japanese researchers based overseas for PRESTO, participation of overseas research members for CREST

Achievements of International Joint Research

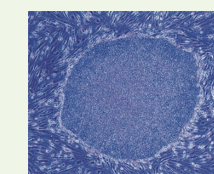
The SBRPs often organize joint workshops in collaboration with overseas funding agencies or research institutes to promote international joint research and networking. For example, Research Area on "Energy Management System (EMS)" organized total of six joint workshops with NSF (U.S.), RCN (Norway), and/or DFG (Germany). Participations of prominent researchers of respective countries nominated by funding agencies made the workshops attractive as excellent opportunities for fostering new international collaborations.

In fact, many new research ideas came out among the participants turned real joint projects later and produced joint publications.



Establishing induced Pluripotent Stem (iPS) cells

Dr. Yamanaka Shinya started his research project for the theme "Generation of Ideal Pluripotent Stem Cells for Clinical Applications" under the Strategic Basic Research Programs in 2003. The professor took an approach completely different from ES cells promoted research aimed at establishing stem cells. The professor succeeded in establishing iPS cells from mouse skin cells in 2006 and from human skin cells in 2007 ahead of his international contemporaries. The result which had surprised the world earned him a 2012 Nobel Prize.



iPS cells derived from human skin cells
Provided by : Center for iPS Cell Research and Application

Competitive funds

FOREST (Fusion Oriented REsearch for disruptive Science and Technology) Program

FOREST supports early-career researchers by providing secure environments to conduct ambitious transdisciplinary research. The researchers are mentored by leading experts, who encourage cooperation and the creation of integrated projects in a "place of fusion".

[Overview]

- Aimed at early career researchers up to 15 years of experience since completion of PhD.
- Provides a secure environment allowing the researcher to focus fully on their work without career concerns, with funding for seven years (extendable to 10 years).
- Researchers pursue long-term visions rather than short-term goals, and cooperate across fields in transdisciplinary projects.

<https://www.jst.go.jp/souhatsu/en/>



Broadening Opportunities for Outstanding young researchers and doctoral students in Strategic areas (BOOST)

• Fostering Researchers in Emerging AI Program (Support for Young Researchers)

The "Broadening Opportunities for Outstanding young researchers and doctoral students in Strategic areas (BOOST)" is a project for developing highly urgent national strategies. This is a project that promotes human resource development and cutting-edge research and development in the field. This project's "Fostering Researchers in Emerging AI Program (Support for Young Researchers)" promotes cutting-edge research and development in the emerging AI field to improve Japan's international competitiveness radically.



• Fostering Researchers in Emerging AI Program (Support for Doctoral Students)

The program supports chosen doctoral students to pursue their research in the field of AI and emerging/combined fields in AI, which is a highly urgent national strategic field. By providing sufficient support for living and research expenses, the program aims to increase the number of researchers in the fields, thereby enhancing innovation creation and industrial competitiveness.

Cutting-edge Research and Development on Information & Communication Sciences (CRONOS)

This program aims to contribute to an advancement of Japan's information and communication sciences through developing innovative technologies in the field and fostering researchers with unique ideas and conceptual skills. It sets challenging goals ("Grand Challenges") with the ultimate objective of bringing about paradigm shifts in information and communication sciences in promoting research. With the Grand Challenges and a flexible scheme that enables integration of basic and applied research, we promote research that leads to a transformation of society, and target to achieve proofs of concept.

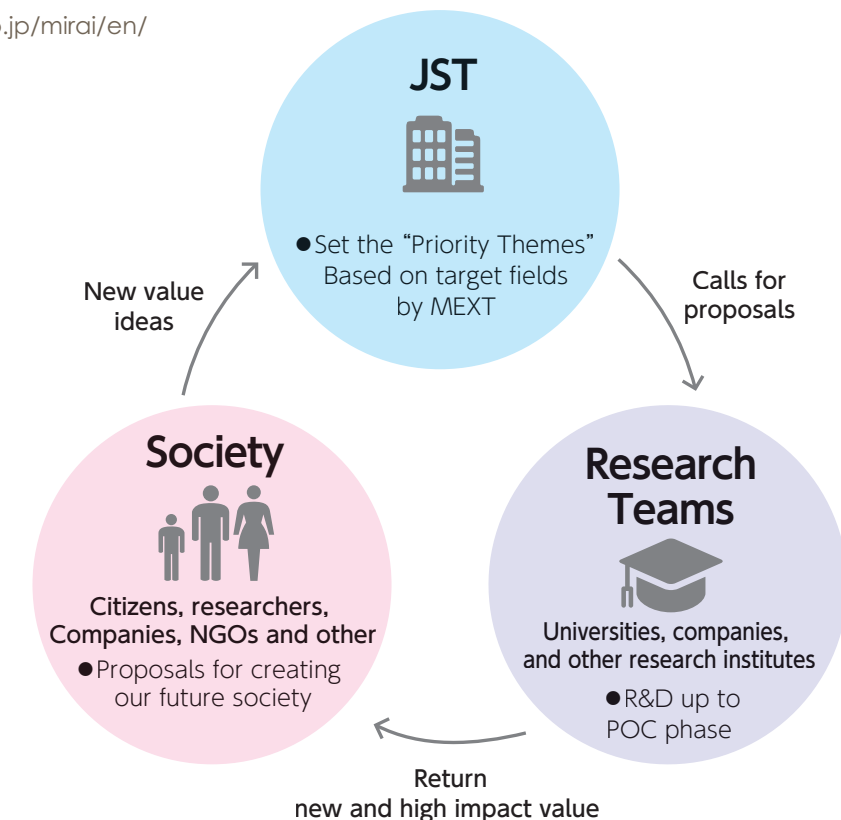
<https://www.jst.go.jp/kisoken/cronos/en/>



JST-Mirai Program

JST-Mirai Program promotes research and development from a basic research stage to a stage where industry can decide whether they could make a business successful (proof of concept: POC). To achieve it, we set goals focusing on clear targets which realize economic and social impact and challenge technological difficulties.

<https://www.jst.go.jp/mirai/en/>



Green Technologies of Excellence (GteX)

The program is massive in scale adopting a cross organizational [team-type] approach and promotes basic R&D for the creation of innovative technologies of Green transformation in three key areas ("Storage Battery", "Hydrogen", "Biomanufacturing"), where Japanese academia has strengths, for the realization of carbon neutrality by 2050.

<https://www.jst.go.jp/gtex/en/>



ALCA-Next (Advanced Technologies for Carbon Neutral)

ALCA-Next program promotes basic research on innovative technologies that are not just extensions of conventional technologies but that will bring about discontinuous innovation, with the aim of contributing to the realization of carbon neutrality.

<https://www.jst.go.jp/alca/en/>



Competitive funds

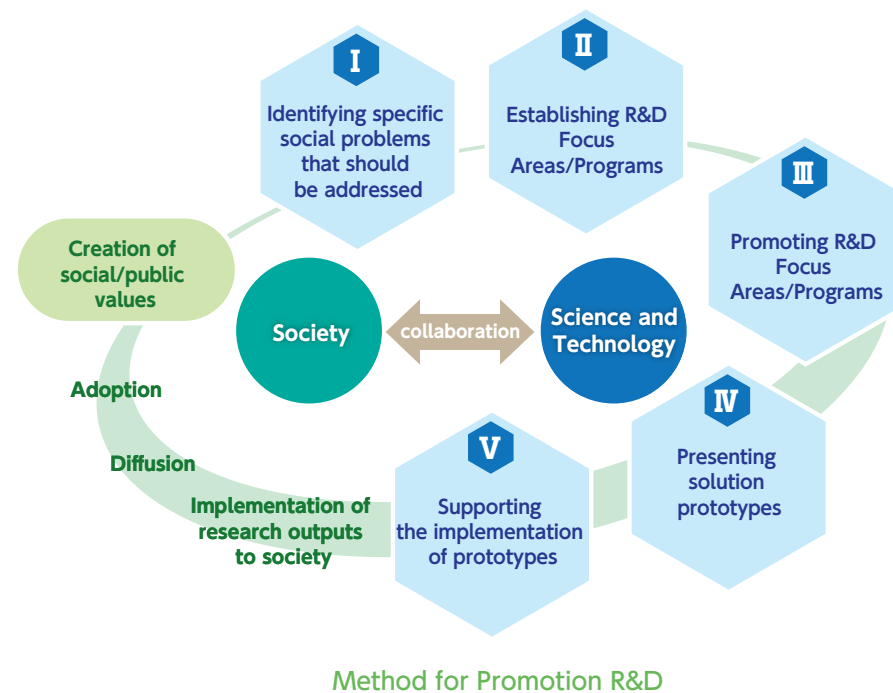
Research Institute of Science and Technology for Society (RISTEX)

RISTEX aims to create innovative social/public values not limited to economic values, by solving specific social problems including SDGs and by responding to ethical, legal, and social issues that arise with the social implementation of emerging science and technology. In the pursuit of R&D in science and technology for society, it supports the collaborative networking of researchers and stakeholders who engage in the resolution of social problems, and carries out R&D that employs knowledge from natural sciences as well as humanities and social sciences (HSS).

R&D Emphasized by RISTEX

- R&D aimed at solving specific social issues
- Transdisciplinary R&D that deals with problems which cannot be sufficiently addressed in conventional disciplines, and attempts to change the current situation by employing knowledge of humanities, social sciences and natural sciences to develop methodologies and implement solutions to the sites suffering from the problems.
- R&D based on collaboration not just among researchers but also with stakeholders from various backgrounds who are knowledgeable about on-site circumstances and/or problems, to carry out social experiments at the actual sites. By strictly following the PDCA cycle, novel outputs useful in resolving social issues are created.
- R&D that maintains a firm and conscious commitment to provide and implement specific outputs to society.

<https://www.jst.go.jp/ristex/en/>



Method for Promotion R&D

Moonshot Research and Development

"Moonshot Research and Development" is a bold new R&D program from JST that aims to create disruptive innovation in Japan. To solve issues facing future society, JST is driving R&D projects to achieve the Moonshot Goals, with the Program Directors (PDs) responsible for the whole R&D projects regarding their respective Moonshot Goals. JST handles Moonshot Goal 1, 2, 3, 6, 8, 9 and 10.

<https://www.jst.go.jp/moonshot/en/>



Moonshot Goal 1

Realization of a society in which human beings can be free from limitations of body, brain, space, and time by 2050.

Moonshot Goal 2

Realization of ultra-early disease prediction and intervention by 2050.

Moonshot Goal 3

Realization of AI robots that autonomously learn, adapt to their environment, evolve in intelligence and act alongside human beings, by 2050.

Moonshot Goal 6

Realization of a fault-tolerant universal quantum computer that will revolutionize economy, industry, and security by 2050.

Moonshot Goal 8

Realization of a society safe from the threat of extreme winds and rains by controlling and modifying the weather by 2050.

Moonshot Goal 9

Realization of a mentally healthy and dynamic society by increasing peace of mind and vitality by 2050.

Moonshot Goal 10

Realization of a dynamic society in harmony with the global environment and free from resource constraints, through diverse applications of fusion energy, by 2050.

AI-ENGAGE (Advancing Innovations for Empowering NextGen AGriculturE)

JST, in cooperation with the National Science Foundation (NSF) of the United States, the Commonwealth Scientific and Industrial Research Organization (CSIRO) of Australia, and the Indian Council of Agricultural Research (ICAR) of India, is supporting international collaborative research among researchers from the four countries.

AI-ENGAGE

Competitive funds

International collaborations

Our Department of International Affairs is committed to expanding the range of collaboration opportunities for our researchers, so ensuring continuous joint innovation and contribution to global challenges.

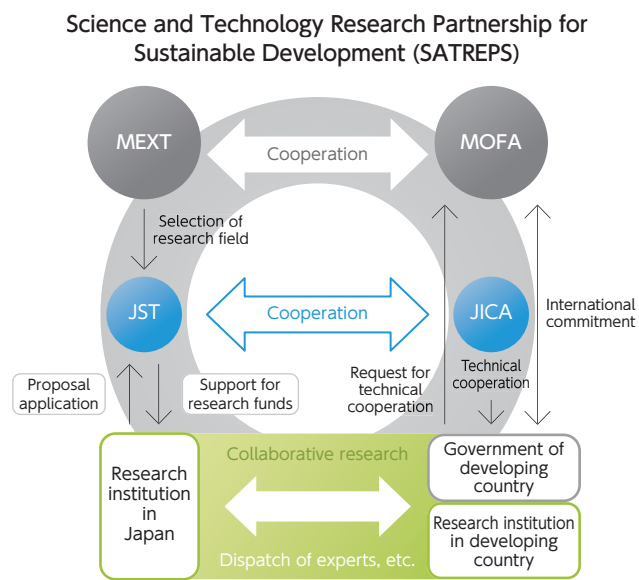
<https://www.jst.go.jp/EN/international/>

Research Partnership for Sustainable Development

SATREPS is part of Japan's "Science and Technology Diplomacy", collaboratively pursued by JST, which provides competitive research funds for the science and technology sector, and the Japan International Cooperation Agency (JICA), which provides Official Development Assistance (ODA). The program promotes international joint research based on the needs of developing countries in fields such as environment, energy, biological resources and disaster prevention, with the ultimate aim of social implementation of research outcomes*¹ in the foreseeable future. The program supports international cooperation and the acquisition of new knowledge to tackle global issues*², advance science and technology, and create innovations. The program also contributes to capacity development*³ of Japan and its partner countries.

*¹ social implementation of research outcomes: the research projects should lead to future social and economic benefits, achieved by using newly obtained knowledge and technology to enhance government services or develop products that can be deployed in the market.

*² global issues: those that are difficult to resolve by a single country or region alone and must be handled by the international community as a whole.



*³ capacity development: boosting self-reliant R&D capacity in developing countries, constructing sustainable research systems that can contribute to resolving issues, coordinating networking between researchers, and training future human resources in partner countries and Japan.

Global Joint Research and S&T Diplomacy

In our world of rapidly expanding globalization, various cross-border problems are arising. For example, problems associated with the environment, energy, natural disasters, and infectious diseases cannot be tackled by any single country alone. To overcome these problems and maintain sustainable development, international cooperation is now a worldwide demand. Moreover, the advance of science and technology around the world is spectacular. Amid intense competition, in order for Japan to sustain and continue to develop its world-class science and technology capabilities, it is more important than ever before for the government to play its role in strategically supporting the international expansion of science and technology.

JST aims to contribute solutions to challenges facing the world today through collaboration with a broad range of countries.



Under an equal partnership cooperative framework with counterpart countries in Europe, America, Africa and Asia, the program contributes to resolving common international issues and strengthening Japan's science and technology diplomacy. It promotes international joint research with the aim of contributing to the creation of impactful science and technology innovation.

Vietnam



Global-scale environmental issues

Establishment of Environmentally Sound Management of Construction and Demolition Waste and Its Wise Utilization for Environmental Pollution Control and for New Recycled Construction Materials

Cameroon



Global-scale environmental issues

Co-creation of Innovative Forest Resources Management Combining Ecological Methods and Indigenous Knowledge

El Salvador



Carbon neutrality

Thermoluminescence Techniques in Geothermal Exploration and Integrated Evaluation System of Geothermal Reservoir

Tajikistan



Carbon neutrality

Development of a Decarbonized Heat Energy Supply System using Ground Heat Source

Bolivia



Bioresources

Strengthening of Resilience in Arid Agro-Ecosystems Vulnerable to Climate Change, Through Research on Plant Resources and Technological Applications

Mongolia



Bioresources

Restoration of Pastureland by Effective Usage of Wild Forage Plants based on Traditional Knowledge of Nomadic Mongolians

Argentina



Disaster Prevention and Mitigation

Numerical Weather Prediction and Warning Communication System for Densely Populated and Vulnerable Cities

Bhutan



Disaster Prevention and Mitigation

Project for Evaluation and Mitigation of Seismic Risk for Composite Masonry Buildings in Bhutan

India



Information and Communications Technology

Data Science-based Farming Support System for Sustainable Crop Production under Climatic Change

Germany



Optics and Photonics

Novel plasmonic materials and nanostructures for ultrasensitive and reproducible SERS/OW/LSPR biosensing for biomedical applications

e-ASIA



Materials (Nanotechnology)

Development of new functional polymers from plant oils by efficient catalytic carbon-carbon bond formation, post modifications

J-RAPID



Kahramanmaraş, Turkey, Earthquake

Business Continuity and Economic Recovery of Companies and Organized Industrial Zone in the Kahramanmaraş Earthquake

■ SATREPS ■ SICORP

Representative programs include SATREPS, SICORP, e-ASIA, EIG CONCERT-Japan, AJ-CORE, Bilateral Collaboration Program etc.

For further information:

<https://www.jst.go.jp/global/english/> <https://www.jst.go.jp/inter/english/>

Facts

214

Projects with 62 Countries and Regions since 2008 under the partnership between counterpart countries of official development assistance (ODA) and Japan, based on the sustainable development needs of developing countries.

700

Projects with 43 Countries and Regions since 2003 under the two programs (SICORP, SICP) based on inter-governmental frameworks mainly with leading countries and regions, to contribute solutions to global challenges.

Competitive funds

AJ-CORE

AJ-CORE (Africa-Japan Collaborative Research) is a multilateral research framework connecting three (or more) countries: Japan, South Africa, and at least one African country. Researchers from other African countries will cooperate on an equal-partnership basis with those from Japan and South Africa, together contributing to issues of local and global significance.



e-ASIA JRP

The e-ASIA Joint Research Program (e-ASIA JRP) is an international joint initiative between public funding organizations of the East Asia Summit member countries. With a central focus on Southeast Asia, the e-ASIA JRP co-funding mechanism aims to strengthen regional research and development capabilities and resolve common challenges in the region.



EIG CONCERT-Japan

CONCERT-Japan began as a platform for international research cooperation activities under the EU's Seventh Framework Programme for Research and Technological Development (FP7). After the conclusion of the FP7 iteration in December 2014, activities continued under the new European Interest Group (EIG) CONCERT-Japan name, with 13 science, technology and innovation (STI) funding agencies from 11 European countries and Japan (as of 2024) partnering to further research collaboration and exchange. Through STI policy knowledge sharing, research exchange, network building and joint funding calls, the program supports Japanese-European research collaboration in a variety of fields.



Belmont Forum

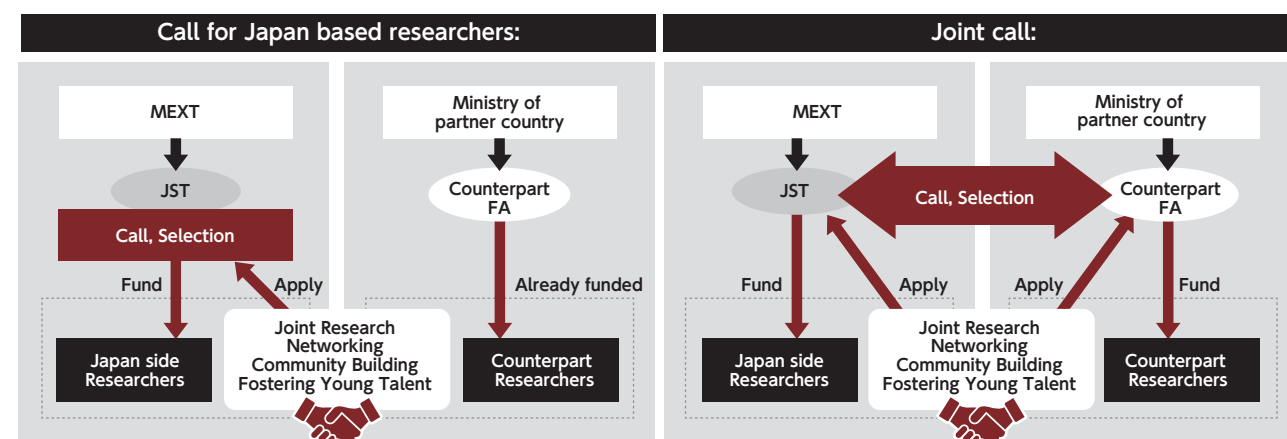
The Belmont Forum gathers the world's major and emerging funders of global environmental change research and international science councils to mobilize and coordinate resources towards its mission of advancing environmental sustainability research. The Forum works closely with the scientific community as well as other key actors such as the Future Earth initiative.

Adopting Sustainable Partnerships for Innovative Research Ecosystem (ASPIRE)

The Adopting Sustainable Partnerships for Innovative Research Ecosystem (ASPIRE) program aims to maintain and improve Japan's scientific and technological capabilities, to connect top researchers in Japan and advanced STI countries and regions through international joint research, and to accelerate talent circulation across the world. We aim to promote pioneering R&D, as well as nurture and mobilize the next generation of research leaders.



<https://www.jst.go.jp/aspire/en/>



Networked Exchange, United Strength for Stronger Partnerships between Japan and ASEAN (NEXUS)

NEXUS is a flexible and multi-layered cooperative framework, leveraged by the long history of science and technology cooperation between both sides with the opportunity of the "50th anniversary of friendship and cooperation between Japan and ASEAN." It is aimed to further strengthen the cooperative research relationship between Japan and ASEAN as partners in co-creating innovations in science and technology.



<https://www.jst.go.jp/aspire/nexus/en/>

Pilot Research within the Global Startup Campus (GSC) Initiative

Under the Integrated Innovation Strategy Promotion Council, the government of Japan is developing a flagship base with functions for research & development in the fields of deep tech, startup incubation/acceleration, human resource development, and community formation and is advancing efforts toward realizing the GSC Initiative — the mission of which is to become a hub for an ecosystem of innovation within a global network. In response to government policy, JST will promote pilot research within the GSC Initiative.

Key and Advanced Technology R&D through Cross Community Collaboration Program (K Program)

Key and advanced technologies are vital for Japan to maintain its edge in the international community, far beyond the immediate future. K Program expedites the R&D and demonstration of such technologies all the way toward practical application.



In pursuit of enhanced national economic security, JST drives R&D in key and advanced technologies toward the nationally defined R&D Vision and R&D Concept.

R&D Vision

The Government of Japan articulates the R&D Vision for enhancing national economic security with key advanced technologies.

R&D Concept

The R&D Concept tangibly defines what needs to be researched and developed to achieve the R&D Vision. JST is tasked with supporting R&D in line with the strategy formulated by the Cabinet Office and Ministry of Education, Culture, Sports, Science and Technology (MEXT).

PROJECT-Type

Support is provided to R&D projects that are carried out on a relatively large scale to acquire key and advanced technologies.

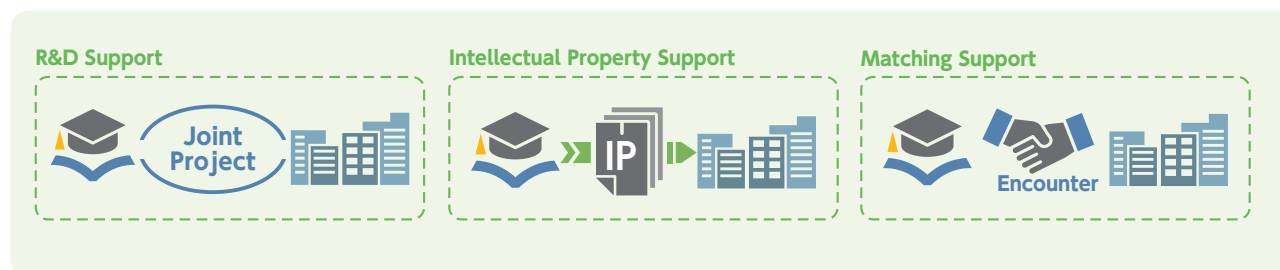
INDIVIDUAL RESEARCH-Type

Support is provided to R&D projects that are carried out on a relatively small to medium scale to acquire key and advanced technologies.

Competitive funds

Promotion of industry-academia-government collaboration and startup creation for co-creation of new value

JST aims to accelerate the transformation of industrial structure and social reform by promoting R&D that intends to solve social issues and create new values through the application of science and technology. In addition, JST carries out activities such as creating and supporting startups from academia as well as acquiring and utilizing intellectual property in order to promote R&D that has potential to transform society in the future and to put such R&D and its results into practical use.



R&D Support

Deployment of R&D Results Through Industry-Academia Collaboration

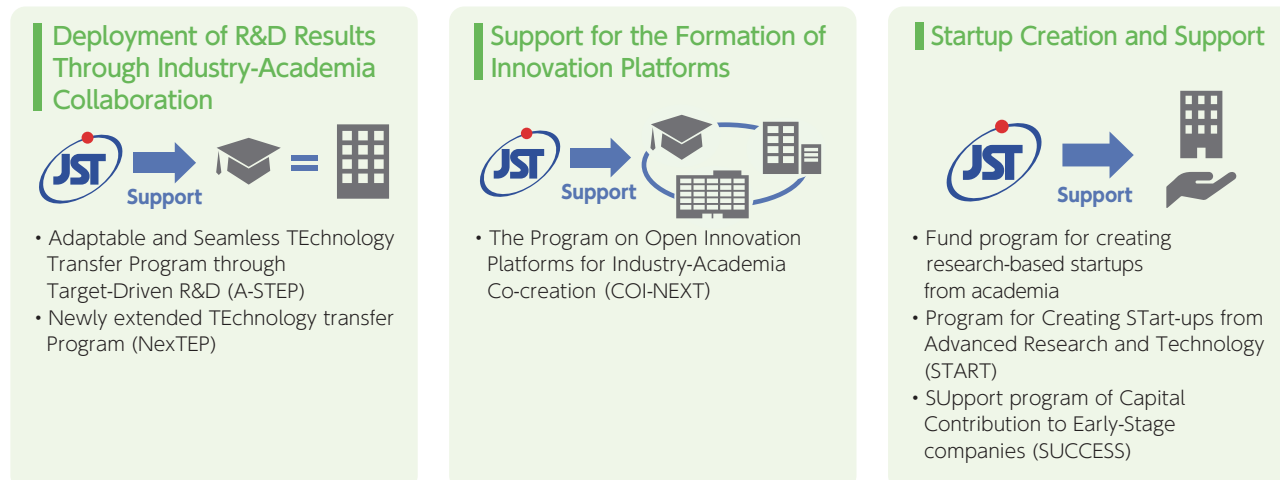
JST serves as a bridge between industry and academia by promoting seamless transfer of research results from academia to industry through activities such as exploration of various technology seeds, hands-on support in accordance with R&D stages and objectives, and financial support for R&D that is highly risky for industry alone to undertake.

Support for the Formation of Innovation Platforms

With universities and other institutions at the core, which are hubs of knowledge and human resources, JST promotes the formation of an environment that generates innovation continuously by forming Innovation Platforms that bring together human, intellectual, and financial resources from industry, academia, and government, while promoting the social implementation of R&D result and strengthening management functions for industry-academia-government collaboration at universities and other institutions.

Startup Creation and Support

JST promotes commercialization of R&D results as well as investment from private companies through activities such as creation and support of startups from academia. In order to strengthen the capacity to create startups from academia, JST promotes research and development that considers commercialization of its results as well as verification of possibility of its global business expansion. JST also promotes formation of an environment that enables activities such as support for creation of startups from academia and human resource development as a foundation of the startup creation activity through industry-academia-government co-creation at universities and research institutions.



Intellectual Property and Matching Supports

In order to promote the commercialization of R&D results of universities, JST carries out activities such as supporting patenting and providing opportunities for industry-academia matching. As for intellectual property owned by JST, JST reviews market trends in relevant areas, strategically seeks out potential licensees and negotiates with them, and establishes licensing agreements.

• Converting Research Output to IP

JST expects universities to improve their intellectual property (IP) management skills through their experience in patent acquisition. JST supports universities in acquiring foreign patents by themselves through patent applications with high potential for technology transfer activities and patent utilization in the future.

Enhancing IP management in JST's R&D

• Supporting intellectual property management for R&D

By involving IP management personnel in JST's R&D operations, JST promotes proper implementation of research results, leading to swifter commercialization.

• Utilizing IP originated from JST funded research

JST constructs strong portfolios of IPs by combining its own IPs originated from JST-funded research programs, those originated from post-JST-funded research programs, and IPs owned by third parties. JST licenses or transfers these IP to private sector entities wishing to utilize them through proactive marketing, which in some case results in establishing new start-up companies.

• New Technology Presentation Meetings

To match academic researchers with industry, JST hosts the year-round meetings on which academic researchers explain their outcome in front of industry named "New Technology Presentation Meetings."

新技術説明会
New Technology Presentation Meetings!



• University Exhibition Fairs : Innovation JAPAN

To provide opportunities for matching high-quality technology seeds with the needs of industry, JST organizes a national-scale Industry-academia matching event named "University Exhibition Fairs : Innovation JAPAN."

大学見本市
Innovation Japan



Facts

57.0 billion(JPY) (FY2023)

Provided by Private Sector for Industry-Academia Collaboration Projects funded by JST.
Provided via Funding from Private Sector, etc., for Startups supported by JST Programs for Startup Creation and Support.

0.2 billion(JPY) (FY2023)

Royalty Income from Patents owned by JST.

International youth science exchange project

SAKURA SCIENCE Exchange Program (SSP)



This program aims to promote international exchange between Japanese youth and youth from overseas in the field of science and technology, through close collaboration with industry-academia-government.

The program's objectives include:

- To support the development of talented human resources from overseas who have the potential to contribute to innovation in science and technology
- To accelerate the brain cycle
- To promote continuous collaboration, cooperation, and interaction between Japanese educational and research institutes and those overseas
- To strengthen favorable relationships between Japan and other countries and regions that can encourage diplomacy in science and technology

Since the program's beginnings in 2014, approximately 43,000 outstanding young individuals from 90 countries/regions have visited Japan, and about 7% of them have revisited Japan after their initial stint in the program for further study or work as of the end of FY2024.

Open application for the SSP

Applicant organization	Japanese organizations and corporations (such as universities, local governments, research institutions, and businesses)
Program duration	7 days to 1 year
Eligible countries	All countries/regions (Each program can include participants from multiple countries or regions.) ※D course applies to India/African countries
Courses	A: Science and Technology Experience Course (up to 7 days) B: Collaborative Research Activities Course (up to 3 weeks) C: Science and Technology Training Course (up to 10 days) D: Annual Mutual Exchange Course (1 year)

<https://ssp.jst.go.jp/en/>



Indian students experience cutting-edge chemistry experiments



Kenyan University Students Learn Aquaponics, a Recycling-Based Farming Method.

Bilateral and multilateral exchanges

We also strategically conduct activities to promote collaboration between institutions in other countries and regions and Japanese universities, etc. This activity is expected to develop into a high-quality exchange program aimed at talent circulation, in addition to cultivating new relationship building.



The 3rd Japan-India Universities Forum—Promotion of Japan-India brain circulation and utilization of its human resources—held in Delhi, India, on October 19, 2024.

Building world-class research infrastructure with the Japan University Fund

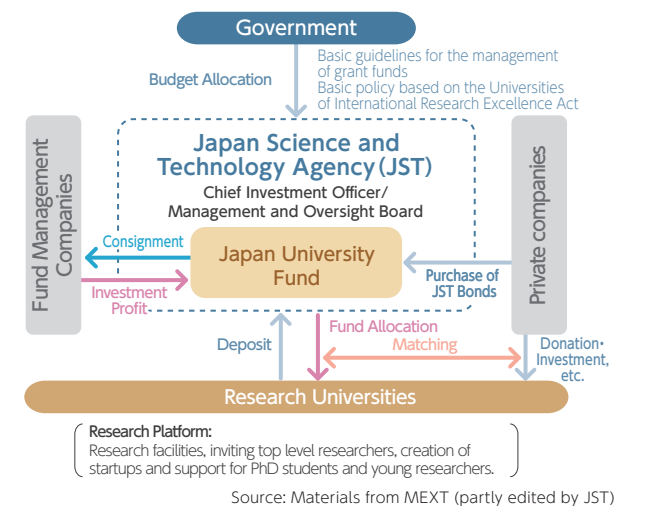
We aim to construct Japan's innovation ecosystem* through the enhancement of a research environment concerning internationally excellent science and technology by leveraging fund investment profits as well as activities which contribute to promoting the development and success of young strong researchers.

* A system to accelerate autonomously innovative creation with mutual involvement of each player, like an ecosystem

Outline of the Japan University Fund

The Japan University Fund was established at the Japan Science and Technology Agency (JST) to realize World-Class Research University. A principal of approximately 10 trillion yen will be invested so that financial resources can be secured to provide the necessary support on a long-term and stable basis.

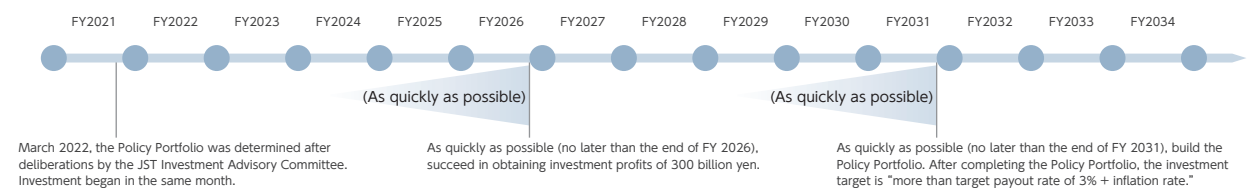
Scheme of the Japan University Fund



Fund investment

1. Investment target

The aim is to succeed in obtaining investment profits of 300 billion yen as quickly as possible (no later than the end of FY 2026), and to build a Policy Portfolio as quickly as possible (no later than the end of FY 2031).

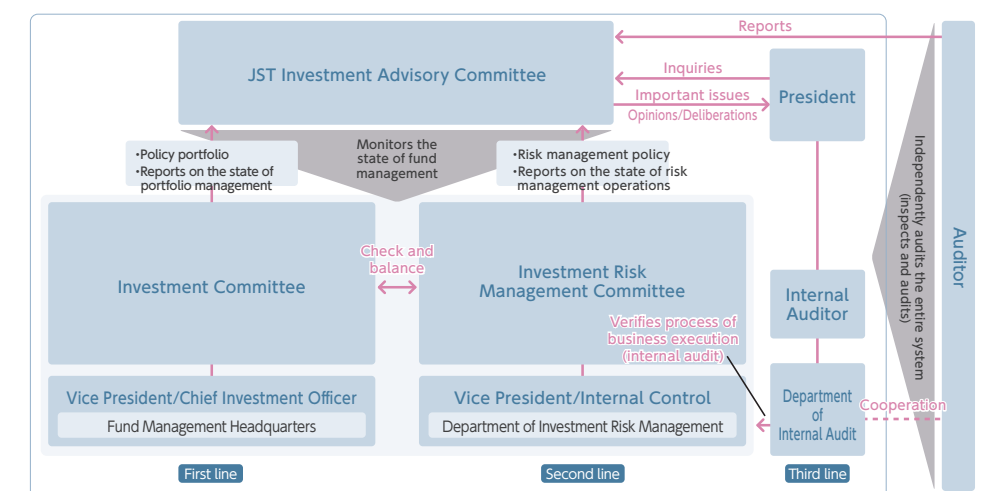


2. Investment method

With regard to grant fund management, global investments (in countries worldwide) will be proactively adopted to link overseas and domestic economic growth with investment profits in a long-term and stable manner by taking advantage of diversification effects among assets (e.g. diversification of investment assets, regions and sectors, etc. and investments in the funds with investments in multiple assets, etc.). Alternative investments, which encompass investment targets and strategies beyond traditional investment products, will be strategically promoted from the perspective of diversifying risks and ensuring medium-to long-term profits.

Governance system

In JST, a governance system has been established with the three lines of defense: the Fund Management Headquarters (First line) and the Department of Investment Risk Management (Second line) have established the operational relationship to hold each other in check under the JST Investment Advisory Committee, and furthermore, the Department of Internal Audit (Third line) independently audits the former two lines. The JST Investment Advisory Committee is composed of external experts who are appointed by the Minister of Education, Culture, Sports, Science and Technology to supervise implementation conditions including deposit investment and provides opinions concerning important matters in response to requests from the President. It also makes recommendations on necessary matters to the President.



Public engagement

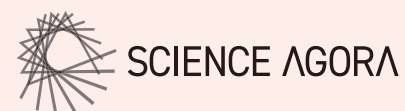
Promotion of "science in/for society"

JST, in addition to communication conveying the knowledge and enjoyment of previous achievements in science and technology, also seeks to promote constructive communication by sharing the tentative nature, uncertainty, and latent risks possessed by science and technology with the nation's citizens, its government, its research institutions, and researchers, for a better society and lifestyle.

<https://www.jst.go.jp/EN/programs/PE.html>

■ Science Forum that foster dialogue among diverse actors to nurture the seeds of collaboration

Science Agora <https://www.jst.go.jp/sis/scienceagora/>



■ Developing R&D through co-creation beyond boundaries

Promotion of co-creation with various sectors

■ Award for outstanding local initiatives to solve challenges using Science, Technology and Innovation

'STI for SDGs' Award

■ Distribution of scientific and technological information through multiple media

Science Portal / ScienceTEAM

A museum creating the future together, with people from all walks of life

This facility allows visitors to experience cutting-edge science and technology through exhibitions and events, covering diverse topics such as robots, quantum computer, space, and the Earth environment. More than simply providing knowledge, the museum offers hands-on opportunities to experience science and technology currently in development, through demonstration experiments and other activities. Science Communicators, who explore the roles and possibilities of science and technology with visitors, also play an essential role in Miraikan's activities. In collaboration with researchers, companies, and other stakeholders, Miraikan serves as a platform for creating the future, together, with people from all walks of life.

<https://www.miraikan.jst.go.jp/en/>



Fostering the Next Generation Human Resources

This program promotes students' interests and abilities in science, technology, and mathematics and fosters future scientists and engineers at international levels.

As part of this program, International Science Olympiads were continuously held in Japan, beginning with the 2016 International Earth Science Olympiad to the 2023 International Physics Olympiad and the International Mathematics Olympiad.

Other programs supported by JST are;

- Super Science High Schools (SSH)
- Supporting Student Contests in Science and Technology
- Japan High School Science Championships
- Japan Junior High School Science Championships
- Global Science Campus
- Fostering Next-Generation Scientists Program
- Science and Technology Challenge Program for Next Generation
- Support for Girl Students in Choosing Science Courses
- Asian Science Camp



Super Science High Schools (SSH) Students Fair



Support for Pioneering Research Initiated by the Next Generation (SPRING)



The program supports the chosen PhD students devoting themselves to unrestricted, challenging and interdisciplinary research projects by providing students' research and living expenses and career development training. Topics in the latter include international mindset cultivation, interdisciplinary research, transferable skills, internships, and more, which help students actively pursuing a variety of career paths.

<https://www.jst.go.jp/jisedai/spring/en/>

R&D strategy planning

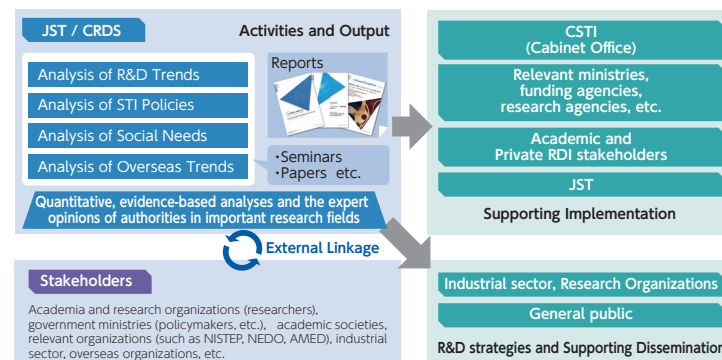
Planning and proposals on research and development strategy

Utilizing the knowledge gained through experience and interaction with various stakeholders, JST comprehensively grasps and analyzes social trends in science, technology, and innovation from inside and outside of Japan and proposes research and technology strategy to maximize outcomes of R&D.

A leading force for innovation and the advancement of science and technology in Japan



The Center for Research and Development Strategy (CRDS) studies and analyzes science, technology and innovation policies of Japan and offers impartial recommendations as a public think tank. The Center studies the state of science, technology and innovation in Japan and beyond, as well as relevant social and policy trends, so as to put them into perspectives and identify key issues. In order to enhance science, technology and innovation policies as well as research and development strategies, it provides useful information and takes initiatives to put them into practice.



Proposed policies and strategies draw heavily on analyses of social expectation and international trends and industry-university-government partnership among diverse stakeholders, in addition to obvious studies of trends in research and development and relevant policies. CRDS aspires to make a broader social contribution through its studies and proposals that can be effectively incorporated into science, technology and innovation policies of Japan and even beyond.

<https://www.jst.go.jp/crds/en/>

Connecting Japan, Asia and the Pacific through science and technology



The Asia and Pacific Research Center (APRC) is promoting the following projects with the aim of becoming a foundation that supports science and technology cooperation between the rapidly developing Asia region, Pacific region and Japan.

Research: Research and publication of research reports regarding science and technology in the Asia-Pacific region.

Networking: Planning and conducting events to connect science, technology, and innovation in the Asia-Pacific region.

Information: Operation of portal sites to share information on science and technology in the Asia-Pacific region.

Provide information on Japan's S&T in English and Chinese

Science Japan (<https://sj.jst.go.jp/>) Kegan Japan (<https://kegan.jp.com/>)

Provide information about S&T in the Asia-Pacific region in Japanese

Science Portal Asia Pacific (<https://spap.jst.go.jp/>)



<https://www.jst.go.jp/aprc/en/>

Social scenario research program towards a carbon neutral society

As efforts aiming at achieving a carbon neutral society accelerate worldwide, science and technology based "affluent carbon neutral society," which brings about sustainable economic and social development as well as CO2 emission reductions in Japan, should be realized. This program seeks to draw up the vision of such a desirable society and proposes social scenarios and strategies that show pathways to the society through social scenario research.

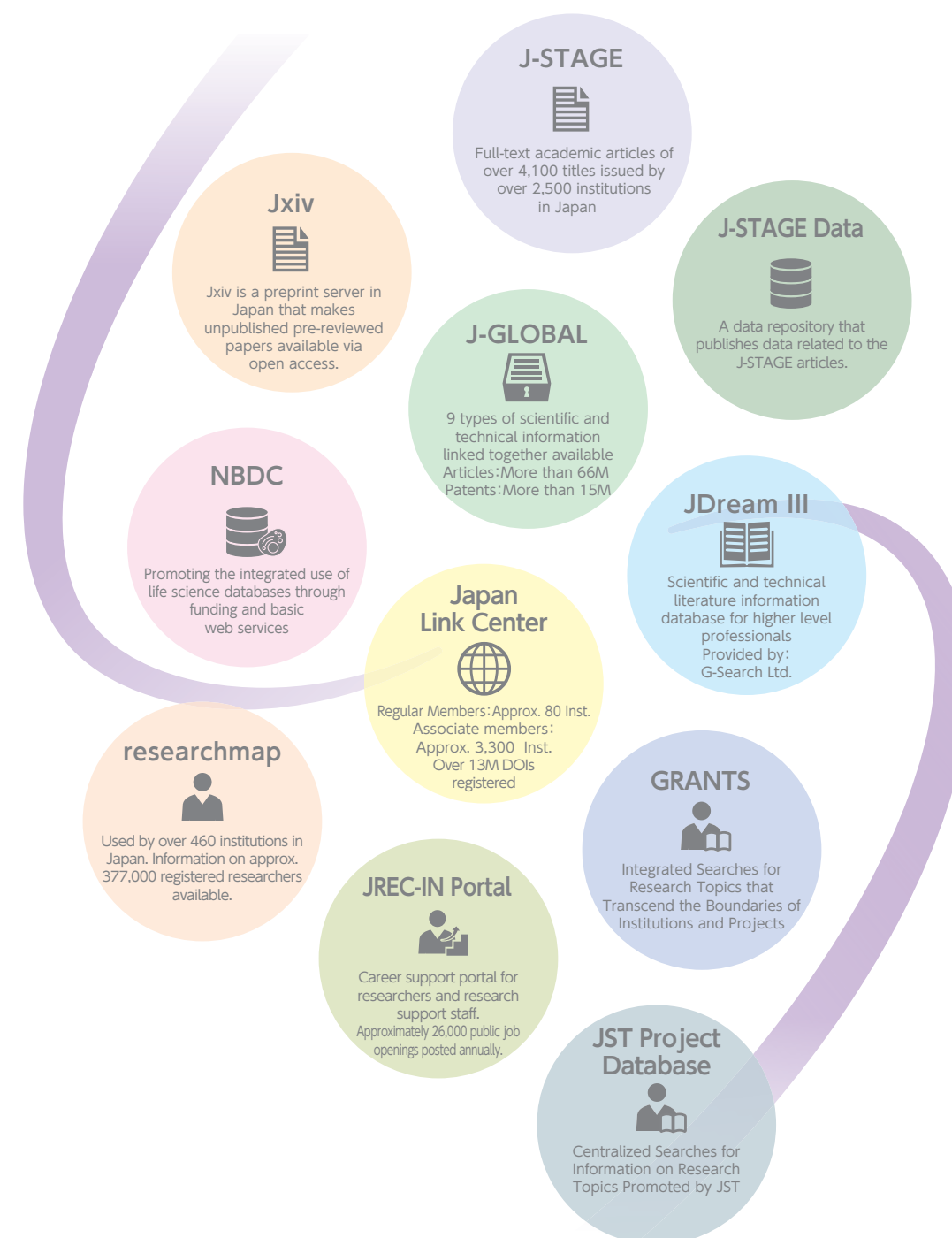
Information platform and database service

Promotion of Open Science

JST established the "JST Policy on Open Access to Research Publications and Research Data Management" (April 2022). From April 2025, specific projects designated under the government policy were subject to an immediate Open Access mandate. In addition, JST co-hosts the Japan Open Science Summit (JOSS) with domestic organizations and collaborates with overseas organizations such as CHORUS to promote open science.

Japan Information Platform for S&T

JST provides information services supporting R&D activities. JST collects and organizes information on research articles, researchers, patents etc., and develops an infrastructure for providing access to the information. JST is also involved with Open Science activities aligned with the international trend.



Information platform and database service

J-STAGE  <https://www.jstage.jst.go.jp/browse/-char/en>

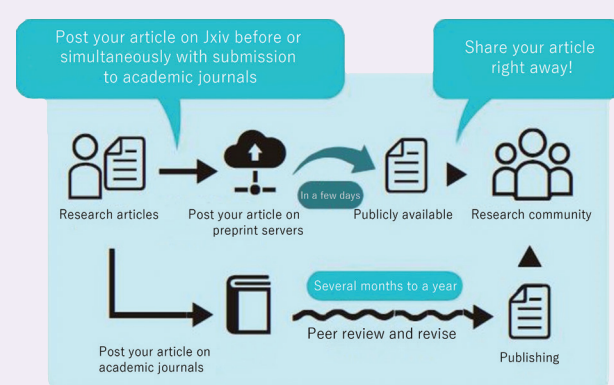
J-STAGE is an electronic journal platform for Japanese learned societies providing access to over 5.7 million academic articles of more than 4,100 titles in the fields of basic sciences, life sciences, medical and health sciences, engineering and technology, interdisciplinary sciences, humanities and social sciences. Approximately 95% of the full-text articles are available for free.



Jxiv  https://jxiv.jst.go.jp/index.php/jxiv/user/setLocale/en_US

A preprint server in Japan that makes unpublished pre-reviewed papers available via open access. It is operated by JST with the aim of supporting the acquisition of precedence on research results, accelerating R&D, contributing to the global academic community, and building public knowledge through the rapid release and sharing of research papers.

Jxiv allows users to submit and publish preprints in all research fields including natural sciences, humanities, social sciences and interdisciplinary sciences in either Japanese or English. There is no charge for submitting, publishing, or viewing preprints.




JaLC  <https://japanlinkcenter.org/top/english.html>

JaLC is a DOI Registration Agency (RA), officially authorized by the International DOI Foundation. JaLC provides services assigning DOI to various contents in Japan including academic papers, books, research data etc. and managing the contents' information.

Number of DOIs registration: Over 13M
Number of Regular Members : approx. 80
Number of Associate Members : approx. 3,300

researchmap  <https://researchmap.jp/?lang=en>

researchmap is a platform for managing, publishing, and sharing information on researchers in Japan. Researchers register their profiles and research outputs on researchmap. researchmap has the data linkage with the systems of universities and provides features to help users find researchers for industry-academia collaboration and joint research.

Integration of life science databases (NBDC Program)  <https://biosciencedbc.jp/en/>

We promote the creation of knowledge and innovation by making research data shared extensively, connected, and easy to use in the field of science. We implement research funding program for databases (DICP) and provide fundamental web services.

Diversity and Inclusiveness

For the Creation of Innovation

To promote the active participation of female researchers, we operate two award programs. The Brilliant Female Researchers Award (The Jun Ashida Award), established in 2019 with the cooperation of the Ashida Fund, founded by Jun Ashida, the late influential fashion designer, honors female researchers who contribute to a sustainable society and the institutions that support their activities. The Marie Skłodowska Curie Award, established jointly with the Embassy of the Republic of Poland in Japan in 2021, recognizes young Japanese female researchers expected to play an active role internationally. The winners of both awards have demonstrated remarkable accomplishments.

As part of promoting gender equality, we also operate the "Childbirth, Childcare, and Nursing Care Support Program" for researchers in JST projects to support the continuation of their research activities.

For further information:

URL : <https://www.jst.go.jp/diversity/en/>



A trophy from The Brilliant Female Researchers Award (The Jun Ashida Award) with an engraving of Mr. Ashida's words and signature. (Photo courtesy of Jun Ashida Co., Ltd.)



A flyer from The Marie Skłodowska Curie Award.

STI for SDGs

Science, Technology and Innovation for the Sustainable Development Goals (STI for SDGs)



In order for science and technology innovation to contribute to the SDGs (STI for SDGs), various stakeholders from universities, R&D institutes, NGOs and the private sector should work with policymakers and the market to create shared value and a new social trend of responsibility. JST cooperates with related organizations inside and outside Japan, distributes relevant information worldwide, and holds events to strengthen cooperation with a range of stakeholders. JST will throughout its organization contribute to achieving the SDGs with a wide range of functions including think tank, R&D funding, academia-industry collaboration, next-generation human resource development, and science communication.

Three Pillars of JST's Basic Policies on the Contribution of STI for the Achievement of SDGs

SDGs for All, STI for All

Promoting public awareness of and advocating the importance of "STI for SDGs"

STI for SDGs

Implementation of programs contributing to the achievement of the SDGs


SDGs for STI

Operating programs from "STI for SDGs" perspectives

Overseas branch offices and liaison office

Our overseas offices are strategically located coordination gateways for science and technology. Please contact them directly to learn more about cooperation opportunities with JST.

Paris Office (Established in 1984)

 TOUR EGEE, 9-11 Alle de l'Arche, 92400 Courbevoie (Paris La Defense), France
Tel. +33-1-5395-3880
<https://www.jst.go.jp/inter/paris/>

The Paris office is JST's first overseas establishment and is primarily responsible for overseeing a broad range of countries across Europe. Our role is to strategically navigate Europe's complex and multi-layered scientific landscape to expand JST's operations across the continent by collaborating with relevant organizations. Additionally, we play a crucial role in gathering local insights for JST headquarters and strengthening Japan's presence in science and technology (S&T) across Europe by actively expanding our network.



News

Forum on the 50th Anniversary of the Japan-France S&T Cooperation December 2024, France (Paris)

The Paris office co-organized the 50th Anniversary event with the French National Centre for Scientific Research (CNRS). The event was also supported by the Embassy of Japan in France, the Japan Society for the Promotion of Science (JSPS), and the French Ministry of Higher Education and Research (MESR). It highlighted the strong partnership and shared achievements in S&T between the two nations.

This forum was part of the celebrations marking the 50th anniversary of the Japan-France Science and Technology Cooperation Agreement.



Presentation at the SAJU Forum August 2024, South Africa (Stellenbosch) 6th South Africa-Japan University Forum (SAJU 6) 27-29 August 2024, Stellenbosch

The SAJU Forum aims to promote academic exchange and collaboration between universities and researchers in Japan and South Africa and is held every two years alternately in Japan and South Africa. At the plenary session titled "Opportunities for Research Collaboration," the Paris office introduced JST's international programs such as AJ-CORE, SATREPS, and the Sakura Science Exchange Program, along with their achievements.



Beijing Office (Established in 2002)

 Beijing Fortune Bldg., No. 5, Dong San Huan Bei Lu, Chao Yang District, Beijing, 100004 China
Tel. +86-10-6590-8272 or 8273 Fax. + 86-10-6590-8270
<https://www.jst.go.jp/inter/beijing/>

The Beijing Office communicates with Chinese governmental agencies, universities, etc., in coordination and collaboration of both countries' science and technology communities. We introduce "Sakura Science Exchange Program" - international youth exchange program and "Keguan Japan" - a website and public social media account providing information about Japan in Chinese language. We also cooperate to hold the China-Japan Science and Technology Forum, and work to enhance JST's presence by participating in central and local government events.



News

Japan-China-Republic of Korea Low-Carbon Forum May 2023, China (Zhuhai)

In collaboration with the China Center for International Science and Technology Exchange (CISTE) and Korea-China Science & technology Cooperation Center (KOSTEC), JST has held the trilateral forum on low carbon society. Adding to the relatively senior researchers' keynote speech, many young researchers made impressive presentations on topics such as synergizing reduction of pollutions and carbon emissions, CCUS systems and inventory & control of greenhouse gases. Participants recognized the importance of trilateral cooperation and discussion.




Forum on ICT Solutions to an Aging Society November 2023, China(Hangzhou)

Since 2017, in collaboration with the China Science and Technology Association (CAST), JST has held the China-Japan Science and Technology Forum on the theme of 'ICT solutions to an aging society'. The 2023 forum was held in cooperation with Chinese Medical Association and several academic institutions, including JST program participants and other leading academia representatives. The impressive presentations lead opportunities to discuss future collaboration in tackling key issues of mutual interest.



Washington, D.C. Office (Established in 2004)

 2001 L Street NW, Suite 1050, Washington, D.C. 20036 U.S.A.
Tel. +1-202-728-0007 Fax. +1-202-728-0707
<https://www.jst.go.jp/inter/washington/>

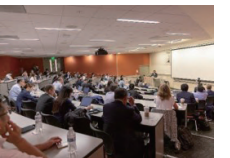
The Washington, D.C. Office's mission is to strengthen scientific cooperation between JST and our counterpart organizations, between JST and local scientists and researchers, as well as to study and analyze STI policies and R&D trends in the US. The office has also helped support various scientific collaborative arrangements with other countries in the Americas.



News

Initiatives to Promote Japan-US Collaborations

As part of an initiative to build a platform for promoting Japan-US research collaborations, the Washington, D.C. Office co-hosted the "Japan-US Research Collaboration Week 2024" with the Stanford University School of Medicine (July 2024). In addition, JST has been recruiting students for the DOE's Lawrence Livermore National Laboratory summer internship program "Data Science Summer Institute" to raise the next generation of researchers in the field of data science.



Science Diplomacy Summit 2024

The Washington, D.C. office participated in the Science Diplomacy Summit 2024, hosted by the Johns Hopkins University, and organized the session titled "JST in Science and Technology Diplomacy." At the session the office discussed JST's role in science and technology diplomacy and introduced our efforts to promote talent mobility and network building among world's top researchers through the ASPIRE program.



News

Strengthening Information Dissemination through the Asia-Pacific Research Center's (APRC) Science Portal Asia Pacific (SPAP)

The Singapore Office closely collaborated with the APRC to enhance exchange and mutual understanding between Japan and the Asia-Pacific region. As a part of this effort, several articles were published on the SPAP platform. This enabled us to provide live information on R&D trends and HR development measures in Singapore that could only be obtained locally in Singapore.




Operation of the e-ASIA Joint Research Program

As the Secretariat of the e-ASIA Joint Research Program, we conducted calls for proposals in the topics of "Health Research", "Disaster" and "Alternative Energy" together with the member organizations from Japan and ASEAN. We also organized two workshops on these open calls. Furthermore, we selected successful projects from the proposals last year in the topics of "Health", "Food and Health", "Agriculture", "Alternative Energy" and coordinated with the member organizations until the start of support to these projects.



India Liaison Office (Established in 2015)

 1650 DLF Build 9A, Phase 3 Rd, Cyber City, Gurgaon, Haryana 122002
Tel. +91-88-0083-0722
<https://www.jst.go.jp/inter/india/>

News

Resilient Planet Symposium

The Resilient Planet Symposium, part of the ISPF program, was held in March 2024 in New Delhi. Organized by the British Council on behalf of the DSIT, the symposium aimed to foster multinational research collaborations to address major environmental challenges and promote a resilient planet. Dr. Kemmochi from JST participated as a panelist. During the panel discussion, he highlighted JST's critical role, emphasized the need for innovative approaches to tackle climate change, and expressed high expectations for the younger generation's contributions through interdisciplinary and collaborative research to create a sustainable future.



Japan Week at IIT Hyderabad