

MEXT National Institute of Science and Technology Policy

科学技術政策研究所

文部科学省

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History

| Jul. 1988 | National Institute of Science and Technology Policy (NISTEP) was founded. |
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| Jan. 2001 | Ministry of Education, Culture, Sports, Science and Technology (MEXT) formed due to administrative reform. NISTEP became an affiliated research institute under MEXT. The Science and Technology Foresight Center was founded as a part of NISTEP. |
| Apr. 2006 | Research Unit for Science and Technology Analysis and Indicators was established. |
| Jan. 2008 | Moved to the new MEXT building in Kasumigaseki (govt.) area (16 th Floor Central Government Building). Opened a satellite office in the National Graduate Institute for Policy Studies (GRIPS). |





NISTEP Overview

Mission

The National Institute of Science and Technology Policy (NISTEP) is a national research institution that was established in accordance with the National Government Organization Law under the direct jurisdiction of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to be engaged in the Japanese government's science and technology policy-planning process. It is expected to ascertain government needs, to collaborate and cooperate with government agencies, and to participate in the decision-making process. NISTEP has three missions:

- 1) To forecast future policy issues and investigate them through autonomous research
- 2) To carry out research in response to requests from government agencies
- 3) As a core institution in the science and technology policy research field, to provide data that forms the basis of research by other institutions and researchers in order to contribute to the accumulation and expansion of knowledge

Objectives

In recent years, the scope of science and technology policy research, including innovation-related policy research, has been expanding. Also, analysis from a broad international perspective has been required. In order for NISTEP to fulfill its mission under the circumstances, it should swiftly respond to government needs and, at the same time, carry out autonomous research that looks to the future. NISTEP works out a mid-term plan every five years, which sets the direction of the fundamental mid- to long-term research activities of the institute. The mid-term plan is available to the public on NISTEP's website. In regard to the annual plan, NISTEP sets up its annual research plan by flexibly responding to conditions during the fiscal year.

Science and technology system reform and strategic prioritization of science and technology were two of the most important strategies stipulated in the Second and Third S&T Basic Plans. Various policies have been developed in accordance with these strategies. There are important science and technology policy research topics in the foreseeable future: Among them are how to improve the performance of the science and technology system as a whole, which fields and areas are the most likely to develop in the future, in particular, which fields and areas Japan should concentrate its resources on for their development, and how to reinforce research and development while meeting future social needs. NISTEP is responsible for addressing these issues proactively. NISTEP is working on the following research topics.

- 1) Research on science and technology systems
- 2) Research on innovation
- 3) Research on fields and areas that are likely to develop in the future
- 4) Research on the relationships between science and technology and society
- 5) Research on items contributing for the follow-up studies of the Third S&T Basic Plan
- 6) Research on evaluation of the results of science and technology policy

Features of NISTEP's Organizational Management

1) Management for effective and efficient promotion of research

In order to respond to the expansion and diversification of the areas covered by science and technology policy research, NISTEP accepts various research personnel from industry, academia and the government, and promotes studies by fully utilizing their experience and knowledge. In order to improve its efficiency, it divides its personnel into small groups. Furthermore, when it works for especially important research topics, NISTEP establishes research committees comprising experts and science and technology policy specialists. These committees are a mechanism for in-depth exchange of opinions on the current state of relevant research and future research topics and methods.

2) Utilization of outside institutions

As it did with research for the formulation of the Third S & T Basic Plan (the Basic Plan Review, the Foresight Survey, and so on), NISTEP allocates its own human resources in core sectors of science and technology policy research, and outsources the less important research activities, such as data collection, to think tanks and other private-sector institutions to the extent that this is possible.

3) Acquisition of outside funds

While carrying out research using its own resources remains fundamental, NISTEP makes the utmost effort to obtain outside funds such as Special Coordination Funds for Promoting Science and Technology, Grants-in-Aid for Scientific Research and foundation grants, depending on the particular research purposes.

4) Securing human resources

To ensure more steady development of younger human resources in fields related to science and technology policy, NISTEP actively hires younger personnel who aim to become leaders in science and technology policy research and provides them with venues for research presentations and opportunities for participation in study groups and symposiums. Furthermore, NISTEP has been actively utilizing the visiting researcher system to receive researchers from the private sector as visiting researchers. NISTEP believes that the visiting researcher system not only stimulates intellectual contact among researchers and improves research results, but also brings new ideas to science and technology policy research through the perspectives of private-sector researchers. NISTEP endeavors to utilize human resources from foreign countries. As part of these endeavors, NISTEP carries out joint research with foreign researchers, accepts foreign students, and accepts

- international affiliated fellows.
- 5) Collaboration with institutions in Japan and abroad

NISTEP has concluded a collaboration agreement with the National Graduate Institute for Policy Studies (GRIPS) and has been actively collaborating with specialized institutions in Japan, such as the Cabinet Office's Economic and Social Research Institute, the Japan Science and Technology Agency (JST), and Hitotsubashi University.

Furthermore, NISTEP has been collaborating with foreign universities and/or research institutes by concluding memorandums of understanding (MOUs).

External Evaluation

NISTEP undergoes external evaluation of all its operations, including its research activities. NISTEP works to improve institutional management and to more effectively and efficiently promote research by appropriately securing and allocating research resources and addressing management issues based on these evaluations. To date, NISTEP has undergone three external evaluations. Starting with its FY2004 Mid-Term Plan, NISTEP moved to undertake external evaluations every five years, coordinating them with the cycle for setting and implementing Science and Technology Basic Plans.

For NISTEP's third institutional evaluation, an External Evaluation Committee comprising outside experts was established in November 2005. Through such efforts as interviews and discussions with relevant personnel from government agencies and interviews with NISTEP research personnel, the Committee studied and evaluated NISTEP's research and all of its operations. The Committee completed its External Evaluation Report in June 2006. NISTEP revised its Mid-Term Plan and is developing its work in light of the various suggestions contained in the report. The External Evaluation Report is available to the public on NISTEP's website.

First Theory-Oriented Research Group

Theoretical Surveys and Research on the Socioeconomic Effects of S&T

Today's economic system is called a "knowledge-based economy." How to create new products, services and processes based on knowledge accumulated through research and development in the areas of science and technology, and to use them to drive economic growth and sustainable development—these are generally recognized as extremely important challenges. In today's science and technology policy as well, various measures are underway to create such innovation and arrange for the necessary environments.

The First Theory-Oriented Research Group carries out fundamental and theoretical research that contributes to such policy development. In evaluating the socioeconomic effects of science and technology, it is necessary for us to have mid to long-term visions for the Japanese socio-economy from a global perspective. In order to address related issues, the First Theory-Oriented Research Group utilizes social-scientific approaches, especially economic theories, to measure the socioeconomic effects of science and technology.

Specifically, the Group is working on the following four research topics.

| | [Research To | ppics for the Period from | April 2008 to March 2010 | 1 | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|
| [Topic 1] | Survey and research on economic factors in dissemination and diffusion of innovative technology, and | | | | | | | | |
| | quantitative impact thereof | | | | | | | | |
| [Topic 2] | Research on diffusion of product innovation | | | | | | | | |
| [Topic 3] | 3] Statistical research on the 2 nd Japanese National Innovation Survey | | | | | | | | |
| [Topic 4] | Quantitative analysis of tech | nnological progress and diff | usion in the medical field | | | | | | |
| FY2008 | [1] Dissemination and diffusion of innovative | [2] Product innovation | [3] Japanese innovation | [4] Technological progress in the medical | | | | | |
| FY2009 | technology Development of quantitative methods for measuring product innovation and process innovation Case studies in the steel industry Survey on the diffusion of innovative production technology Quantitative analysis and evaluation of process innovation Case studies in the pharmaceutical industry Survey and analysis of policy and system concerning marketing and diffusion of new drugs Analysis of new drug development projects, patent data, sales data, etc. Analysis of licensing agreements and external collaboration Quantitative analysis of effects of product innovation | Case study on auto industry Study on the policies and regulations affecting auto industry Quantitative evaluation of the effect of the preferential policy for low-emission cars Quantitative evaluation of the effect of the preferential policy for light cars Case studies on photovoltaic generation Policy for the diffusion of photovoltaic generation Analysis of the effect of subsidy on the diffusion of photovoltaic generation Analysis of the effect of new electricity system Case study on consumer electronics industry Research on the home color television market Quantitative analysis on diffusion of hi-vision broadcasting and terrestrial digital broadcasting Quantitative analysis on diffusion of high-definition digital television | Statistical research on the 2nd Japanese National Innovation Survey (J-NIS2009*) Preparation of survey sheets to make international comparison possible Application procedures for approval for conducting J-NIS2009 Implementation of statistical survey Compilation of data Organization of data on the 1st National Innovation Survey (J-NIS2003) and explanation of the contents J-NIS stands for Japanese National Innovation Survey Detailed analysis using the Japanese National Innovation Survey Reporting the results of J-NIS2009 analysis at international conferences Development of research areas by Japanese researchers on innovation | field Study on health care systems Comparative study on Japan and US health care systems (health care costs, health insurance, etc.) Study on health care systems and diffusion of technological progress Case study on medical device industry Study on diagnostic imaging equipment industry (e.g., CT scanning, MRI) Quantitative analysis on technological dissemination and cost-benefit performance (health care costs, disease prevention effect) Research and analysis on the R & D environment surrounding medical device industry | | | | | |

Second Theory-Oriented Research Group

Comprehensive Research on Innovation Systems

The innovation process is formed by interaction among various actors, i.e., firms, government, universities, and other research institutions. In order to realize the "continuous generation of innovation" described in the Science and Technology Basic Plan, it is essential to base policies on a view of the interactions among these actors as a nationwide system, in other words, as a national innovation system.

To contribute to drafting such polices, the Second Theory-Oriented Research Group addresses theoretical and empirical research topics with the aim of clarifying the roles of each actor in the innovation process and the functions of interactions among them, such as industry-university cooperation. In addition, with synthesizing these analytical results, the Group pursues a research program to devise methods for evaluating the performance of the innovation system as a whole.

Analysis of innovation system Universities & Provision of system Government research institutes infrastructure/funding romotion of basic and scientific Promotion of science and research, accumulation of technology policy knowledge, development o Feedback regarding issues and problems human resources in the system/provision of knowledge Survey on the mobility of university researchers Research on the cultivation of organizational knowledge that promotes innovation n intrastructure Understanding of the history of Japanese science and technology research through oral history inane .7 Research on the effect of changes in patent system and system business organization on innovation activities Functional analysis of universities by building of database on industry-university cooperation E. Research on the scientific R&D Firms services in industry Survey on R&D activity of private firms **~**..... R&D on new products and Analysis of the effect of changes in the Research on integrating manufacturing processes management of technology and enterprise boundary in the design in the product development pharmaceutical industry on innovation process

The National Innovation System and the Research Topics for FY2009

First Policy-Oriented Research Group

Research on Science and Technology Human Resources

In order for Japan to enhance its international competitiveness and basic scientific capability, it is essential to develop excellent science and technology human resources. It is also important to let science and technology human resources that support the knowledge-based society work actively in various sectors of the society.

From these perspectives, the First Policy-Oriented Research Group has been conducting research on the sequence of career formation from human resources cultivation at graduate schools to development of human resources that support the knowledge-based society and the world's leading researchers, as well as the actual conditions of their research activities. In recent years, the Group has conducted surveys on the education system at graduate school, career trends of postdoctoral researchers, and mobility of researcher, aiming to have the results of the analyses reflected in policy making.



Second Policy-Oriented Research Group

Research Studies on Promoting S&T for Understanding and Relationships with Society

When the Japanese government seeks for a nation built upon the products of science and technology (S&T), we expect that more Japanese people would enhance their interests in and understanding of S&T. For this purpose, the Second Policy-Oriented Research Group has been conducting the research studies and activities in which such issues as Japanese S&T literacy and education are surveyed, and S&T communications are developed. These studies and activities would be used for the advancement of societal interests in and awareness on S&T.

In addition, it is necessary for S&T to enhance the richness, safety, and security of society, by creating a chain of processes in which excellent scientific activities would actually provide us with outstanding research findings, and then these findings would contribute to our society. Our group, therefore, has performed several research studies for planning the promotion of responsible scientific activities and the contribution of scientific achievements to our society.

Conceptual Image of Research Studies on Promoting S&T for Understanding and Relationships with Society



Third Policy-Oriented Research Group

The Group is engaged in research activities to face issues and matters with regard to driving Science & Technology-based innovation, centering on industry-academia-government collaboration. The Group has also been conducting research studies focused on specific themes or issues with regard to S&T trends in other countries.

Surveys and Research on the Current Status and Issues of Industry-Academic-Government Collaboration and Academic Start-ups

With regard to industry-academic-government collaboration, the government has implemented many relevant measures, including the improvement of the collaboration framework at universities. However, it is said that the collaboration is at the stage of developing into a sustainable system for the creation of innovation. Under such circumstances, the Group has been conducting research studies aimed at clarifying the current status and issues of industry-academic-government collaboration.

Academic start-ups are one of the means to utilize the results of research conducted by universities and other public institutions and they are expected to play an important role in the creation of innovation. Therefore, the Group is engaged in research studies aimed at clarifying the current status of academic start-ups and issues involved in promoting such start-ups.

Surveys and Research on Regional Innovation Activities

Regional S&T activities and innovation activities are expected to contribute to the advancement and diversification of Japan's science and technology as a whole, and to the strengthening of its competitiveness. From this perspective, the Group has been conducting research studies on the relationship between regional S&T activities and the performance of regional innovation.

In particular, focusing on the food industrial clusters among regional industrial clusters, the Group carries out research with a view to clarifying future directions, including the roles that the "academic sectors" and "public sectors" should play when they create regional clusters with the use of regional "*intellectual*" resources.

Survey Research on Policy Trends in Other Countries Concerning Specific S&T Policy Themes

In fiscal 2009, the Group conducted survey research on some of the specific issues and matters of concern addressed by other countries in such policy areas as basic research, prioritized measures, and regional and national innovation policies.



Science and Technology Foresight Center

In order to promote strategic S&T policies, we need to have cross-sectoral perspectives, as well as accurate information and knowledge on S&T fields, which can be obtained by identifying the latest R&D trends and conducting comprehensive analysis of future prospects. The Science and Technology Foresight Center (STFC) carries out in-depth analyses on S&T trends, including a future outlook for society.

Research on Priority S&T Areas

The STFC analyzes trends in hot S&T areas and related policies to identify priority matters and R&D topics that the government should address. Outside experts provide valuable views and suggestions by giving lectures and interviews. The STFC also collects information and opinions from outside experts by using the STFC-operated Science and Technology Expert Network (linking approximately 2,000 industry, academia, and government experts on science and technology via the Internet).

The results of analyses appear in the monthly *Science and Technology Trends* as reports and featured topics. The reports are translated into English and published four times a year in *Science and Technology Trends: Quarterly Review.*

<Report subjects in the issues from April 2009 to March 2010>

Life Sciences

- Trends in Recent Research of Epigenetics, a Biological Mechanism that Regulates Gene Expression
- Microalgae Pioneering the Future Application and Utilization -
- The Current State of Antibody Drugs and the Challenges Being Faced

Environment, Energy

- Steel Industry's Global Warming Measures and Sectoral Approaches
- Trends of Research and Development of Dye-Sensitized Solar Cells
- Current State and Future Perspective of Soil Contamination Countermeasures

Nanotechnology and Materials

- Developing Human Resources to Support Japan's International Competitiveness in Industry – Human Resource Development Model for the Steel Industry, One of Japan's Key Industries –
- Recent Developments Concerning Moves Toward Research Papers on E-Journals
- Trends of Research on Covalent-Network Material with Novel Functionalities
- Trends of R&D of Materials for High-Power, High-Capacity Lithium-Ion Batteries for Use in Automobiles

Science and Technology Policy

 Report on the Annual AAAS Forum on Science and Technology Policy (2009)

Information and Communication Technologies

- Confusion in Electromagnetism and Implications of CPT Symmetry - System of Units Associated with Symmetry
- Regional Foresight Scenarios in Germany IT and the Media in Baden-Württemberg in 2020 -
- Left-Handed Metamaterial Technologies Significant for Information and Communication Devices
- Expanding Use of Web API Broad Potential of Mashup -
- Current State and Future Direction of E-Government: in Japan - Centering on Electronic Application Procedures

Monodzukuri (manufacturing) Technology, Social Infrastructure, Frontier

- Trends of Software R&D for Numerical Simulation -Parallel & Distributed Hardware and Software Auto Tuning -
- Promotion of Field-verified Studies on Sediment Transport Systems Covering Mountains, Rivers, and Coasts
- Challenges Facing Japan in Research of the Arctic Environment
- Gap Between Research and Implementation -Prediction of Tokai Earthquake -
- R&D Activities for Aeronautics S&T in Japan, the United States and Europe
- Promoting Innovations in Space Exploration
- Trend in Research of Ocean Acidification
- Hydro Power Technology as Renewable Source of Energy in New Era



S&T Foresight

Large-scale foresight surveys have been carried out in Japan approximately every five years since 1971. In FY2003–2004, the STFC carried out the eighth S&T Foresight, with the aim of providing basic information for discussion regarding the Third Science and Technology Basic Plan (FY2006–2010). Some new approaches were added to the technology-centered method that had been used since the first survey. The eighth foresight survey gives comprehensive perspectives of a wide array of targets, from basic science to socioeconomic needs, with a combination of extrapolative and normative methods. The result of the surveys contributes to lively discussions on the society that Japan is aimed to become in a long run. They made a significant contribution to the long-term strategic guidelines "Innovation 25" decided by the Cabinet in June 2007. The ninth foresight was carried out in FY2008 - 2009.

With an awareness that S&T foresight is a valuable tool for S&T policy planning, many countries are exploring new methods to meet the needs of policymakers. The STFC collaborates in foresight-related research with overseas institutions.

Survey on Outcomes of Government Investment

There are concerns that government investment in science and technology and its outcomes are not fully understood by the public. When discussing to maintain or expand government S&T investment, it is necessary to explain to the public the role of the government in S&T investment and the results of investment. We have conducted a survey on recent S&T cases that have produced outstanding results and S&T cases that are expected to produce outstanding results in the future from the following view points, and disseminated them to the public in an easy-to-understand way.

- (1) Diversified results achieved by universities and research institutions (Questionnaires about research results were sent to universities and public research institutes and a database was built based on the questionnaire collected)
- (2) Roles of public R&D support (From among the cases having high impacts on the economy, society and citizens' life, and closely related to public support, the following 12 cases were selected based on the objective opinions of experts)



(12 examples of outstanding results of recent years)

Research Unit for Science and Technology Analysis and Indicators

The Research Unit for Science and Technology Analysis and Indicators carries out fundamental research such as measurement of science and technology activities.

S&T Indicators

The "science and technology indicators" systematically analyzes S&T activities in Japan and other countries based on objective and quantitative data. It aims to provide basic data for use in planning and formulating future S&T policies. It is published every year. The whole structure of the fiscal 2009 edition has been revised in order to make time-series or international comparisons of indicators easy. Also, several improvements have been made to facilitate the interpretation of figures, such as adding reminder marks to graphs and figures requiring attention when making time-series or international comparisons.

Survey of Scientific, Technological, and Academic Activities in Universities

This survey, which has been conducted annually since 2006, is designed to obtain basic data on research activities at universities, etc. (national, public, and private universities, and inter-university research institute corporations). The survey asks respondents to state the number of researchers by science field, intramural expenditure on R&D, and research funds received from outside. In addition, it asks about percentages of young (age 37 or younger), female, and foreign researchers and how they are supported. In the latest survey (released in May 2008), the number of young researchers was 12,818 (13,519 in the previous year), accounting for 20.6% (21.7% in the previous year) of all researchers in the responding universities.

Expert survey on Japanese S&T system

What do authorized researchers and experts think of the current status of the science and technology system in Japan? This survey tries to track the changes in the Japanese S&T system over the duration of the Third Science and Technology Basic Plan. To do so, the same questionnaires are sent to a fixed cohort annually (FY2006 to FY2011). The third survey, which was conducted in FY2008, included an additional survey on the international mobility of researchers. It revealed that the number of Japanese students and young researchers going abroad has decreased from that in 2001. As reasons for the decrease, it cited the facts that it is difficult to find a job after returning Japan and that their positions after returning Japan are not guaranteed.

Quantitative Analysis of Research Trends Using Bibliometric Methods

With the aim of gaining a comprehensive and quantitative understanding of views on science and technology trends, we analyze research and development trends and the science and technology level of each country using a database comprising scientific papers (e.g., time series analysis of scientific strengths and weaknesses in each country, and an institution level analysis that reveals their characteristics). In addition, we make a "Science Map" every other year in order to identify hot research areas in science and analyze their characteristics.

Research Area Correlation Map

The yellow dots signify the centers of hot research areas, and the numbers written beside the dots indicate the ID numbers of the areas. The gradation corresponds to the frequency of citation. This map shows the close relationship between clinical research and basic life science, and also explains that nano-science is positioned in between chemistry and physics. Source: NISTEP Report No. 110: Science Map 2006



NISTEP Award

In 2005, NISTEP founded the "NISTEP Award." Every year NISTEP recognizes a dozen researchers in various science and technology fields for "achieving outstanding results in a science and technology field, making socioeconomic contributions or creating new visions for the public's future," or "making a major contribution to preventing and overcoming the unpopularity of mathematics and science studies" and gives them a certificate of commendation. The winners are selected after consulting with more than 2,000 experts. The work of the selected researchers is displayed at the NISTEP Award Exhibition, etc.

International Activities

It is important to maintain a liaison and cooperate with domestic and overseas research organizations and researchers who are conducting research in the field of S&T policy. NISTEP therefore has been carrying out international cooperation and collaboration in a variety of fields, by exchanging memorandums of understanding (MOU) with overseas universities and research institutes. Under the MOUs, NISTEP and its counterpart organizations have been promoting international activities, including the following: the exchange and sharing of information, carrying out joint research programs, exchanging researchers, and sponsoring international events including symposia, workshops, and seminars.

Researcher Exchanges

| | | | | | FY 2009 res | sults (As of Fe | eb. 26, 2010) |
|---|------|------------------|-------------------------------|--------|-------------|-----------------|---------------|
| | Asia | North America | Central & South America | Europe | Oceania | Middle East | Africa |
| Attendance at international conferences, etc. | 13 | 7 | 1 | 9 | 1 | 0 | 2 |
| Foreign visitors | 15 | 11 | 0 | 12 | 0 | 0 | 0 |
| Training | 2 | 0 | 0 | 0 | 0 | 0 | 0 |

Major Relationships with Overseas Institutions (status of MOUs)



International Conferences

- Fourth Japan-China-Korea Science and Technology Policy Seminar Dates: October 8 (Thu.)–9 (Fri.), 2009 Venue: Hotel Keihan Kyoto, Kyoto (Japan)
- International workshop "The Role of Design Management in Innovation Process" Date: February 25 (Thu.), 2010
 - Venue: Soukairou Hall, National Graduate Institute for Policy Studies, Tokyo (Japan)
- International conference; "Science and Technology Innovation Policy after the Economic Crisis: Toward Sustainable Growth"
 - Date: March 4 (Thu.), 2010
 - Venue: Auditorium of Ministry of Education, Culture, Sports, Science and Technology, Tokyo (Japan)

Dissemination of Research Results

Recent Reports

1) NISTEP Reports

- No.116 Executive Summary of Survey Research for Follow-Up on Third Science and Technology Basic Plan
- No.117 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of Recent Trends of Science, Technology and Innovation Policies in Selected Countries/Areas
- No.118 Survey Research for Follow-Up on Third Science and Technology Basic Plan Comparative analysis of R&D inputs and outputs between Japan and major countries *
- No.119 Survey Research for Follow-Up on Third Science and Technology Basic Plan Economic Analysis of Innovation Outcomes: Productivity and Economic Welfare *
- No.120 Survey Research for Follow-Up on Third Science and Technology Basic Plan Interview Investigation to Domestic and Foreign Scientists *
- No.121 Survey Research for Follow-Up on Third Science and Technology Basic Plan A Benchmark Survey of Excellent Research Organization *
- No.122 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the State of Japanese Universities System *
- No.123 Survey Research for Follow-Up on Third Science and Technology Basic Plan A survey about mobility of researchers and diversity of research organizations *
- No.124 Survey Research for Follow-Up on Third Science and Technology Basic Plan Concise Summary of "Analysis on Graduate Education in Japan" Project
- No.125 Survey Research for Follow-Up on Third Science and Technology Basic Plan Concise Summary of "Analysis on Graduate Education in Japan", Project Part 1 An International Comparison of Graduate Education in Natural Science and Engineering*
- No.126 Survey Research for Follow-Up on Third Science and Technology Basic Plan Concise Summary of "Analysis on Graduate Education in Japan", Project Part 2 Career Trends Survey of Recent Doctoral Graduates *
- No.127 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the Innovation Systems Part 1 *
- Industry-Academia-Government Collaboration and Patent Management *
- No.128 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the Innovation Systems Part 2 Regional Innovation *
- No.129 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the Innovation Systems Part 3 International Standards *
- No.130 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the Innovation Systems Part 4 The Advanced Large-Scale Research Facilities *
- No.131 Survey Research for Follow-Up on Third Science and Technology Basic Plan Analysis of the Innovation Systems Part 5 Enterprise Environment for Start-ups *
- No.132 Survey Research for Follow-Up on Third Science and Technology Basic Plan Collecting the Data Study for Evaluating the Achievement of the S&T Basic Plans; Summary *
- No.133 Survey Research for Follow-Up on Third Science and Technology Basic Plan
- Collecting the Data Study for Evaluating the Achievement of the S&T Basic Plans *
 No.134 Survey Research for Follow-Up on Third Science and Technology Basic Plan
 Science and technology outcome supported by government investment *
- No.135 Survey on Research Activities of Private Corporations (2008) *
- 2) Policy Study
 - No. 15 Specialized Statutory Mediator Organization
 - -The framework of social governance in science and technology based on the case studies on bioethical problems -*



- 3) **Research Materials**
 - No.163 Survey on Mobility of Science and Technology Researchers in Japan *
 - No.164 AAAS Symposium; East Asian Science Policies and New Global Realities
 - No.165 Attitude Survey on the Career Choices of Students in Master's Courses of Science and Engineering in Japan *
 - No.166 University-Industry Collaboration and Regional Innovation in Thailand -Its Current State and Issues- *
 - No.167 Report of the Survey of Scientific, Technological and Academic Activities in the Universities *
 - No.168 Survey Research for Follow-Up on Third Science and Technology Basic Plan
 - Emerging fields in Science and Technology for the 4th Science and Technology Basic Plan * No.169 The Worldwide Trends in the Fields of Electronics and Information & Communications - the - *
 - Overview of IEEE Periodicals (1992-2007)
 - No.170 Science and Technology Indicators 2009
 - No.171 Research on Human Resource Issue in Energy Field *
 - No.172 Innovation Process in the Science-based Industries III: Results from a Questionnaire Survey on the Physical Society of Japan *
 - No.173 Academic Start-ups Survey 2007-08 *
 - No.174 Graduate student mobility between higher education institutions in Japan: Opportunities and issues of students in Master's courses of Science and Engineering '
 - No.175 The comparative analysis of selected countries/areas on key issues identified in the 3rd Science and Technology Basic Plan *
 - No.176 The Field Trends in IEEE Periodicals *
- **Discussion Papers** 4)
 - No. 49 University-Industry Links Personnel and Training in Japan: A Review of Survey Results
 - Study on the Organizational Knowledge of Research Laboratories with Long Histories: A No. 50 Genealogical Investigation of Laboratory, Case1 *
 - No. 51 Study of Understanding People's Needs to Science and Technology in Spiritual Affluence Age*
 - No. 52 Study on Issues of Regional Innovation System in Japan *
 - No. 53 Survey on contribution of Academia-Government with food industrial cluster to local revitalization *
 - Intra-plant Diffusion of New Technology: Role of Productivity in the Study of Steel Refining No. 54 Furnaces
 - Research on Opening Technology Transfer Process and Potential of Japan's Technology Transfer No. 55 Market *
 - An economic analysis of the public subsidy for the solar energy adoption in Japan * No. 56
 - Cost-benefit analysis of new solar feed-in tariff schemes in Japan * No. 57
 - The Development of University Educational Organizations in the Field of Life Sciences and No. 59 Biotechnology, and University-Industry Joint Research *
 - Career-passes to Faculty Professors in National Universities of Japan The analysis of actual No. 60 state of inter-national university transferring and promotion - *
- Science and Technology Trends 5)
 - Science and Technology Trends: No. 94 No.105 (January December, 2009) *

Science & Technology Trends: Quarterly Review No. 30-No. 33 (April -December, 2009)

NISTEP News and Annual Reports

In order to widely disseminate NISTEP activities to the general public both in Japan and overseas, NISTEP publishes a monthly journal called "NISTEP News" and the annual reports (In Japanese).

Dissemination of Research Results

NISTEP makes its research results available for public inspection on its website so that a wide range of people in the R&D field can easily use such results for their activities. (http://www.nistep.go.jp)



National Institute of Science and Technology Policy, Ministry of Education, Culture, Sports, Science and Technology

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A 2-min walk from Toranomon Sta. (Exits 6 and 11) on the Tokyo Metro Ginza Line

A 5-min walk from Kasumigaseki Sta. (Exit A13) on the Tokyo Metro Chiyoda Line, Tokyo Metro Hibiya Line, and Tokyo Metro Marunouchi Line

A 15-min walk from Sakuradamon Sta. (Exit 4) on the Tokyo Metro Yurakucho Line

A 10-min walk from Uchisaiwaicho Sta. (Exit A4) on the Toei Mita Line

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