Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI-

FY2013

Specially Promoted Research,
Scientific Research(S/A/B/C),
Challenging Exploratory Research,
and
Grant-in-Aid for Young Scientists (A/B)

September 1, 2012

Japan Society for the Promotion of Science
(http://www.jsps.go.jp/)

Introduction

The current round of call for proposals lists the necessary procedures and other matters for the Details of the Call for Proposals or Application of the Grants-in-Aid for Scientific Research-KAKENHI- for FY2013 “Specially Promoted Research, Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)”

It consists of:

- **Ⅰ Outline of the Grants-in-Aid for Scientific Research**
- **Ⅱ Details of the Call for Proposals**
- **Ⅲ Instructions & Procedures for those Intending to Apply**
- **Ⅳ Instructions & Procedures for those Who Have Already Been Accepted**
- **Ⅴ Instructions & Procedures for Staff of the Research Institution**

Among these, are listed in the “Ⅱ Details of the Call for Proposals”: Eligible Candidates for the Research Categories for which a Call for Proposals is Organized; Total budget provided and Research period and other matters; and Schedule from Application to Receipt of Funding and other issues.

In addition, in “Ⅲ Instructions & Procedures for those Intending to Apply”, “Ⅳ Instructions & Procedures for those Who Have Already Been Accepted” and “Ⅴ Instructions & Procedures for Staff of the Research Institution” are listed: “Conditions for Applying”, “Necessary Procedures”, and other matters, for those who are eligible to apply. Individuals to whom it may concern are requested to make sure that they verify the relevant parts of the text.

The current round of call for proposals opens before the finalization of the budget for FY2013 in order to enable researchers to proceed with their preparations for the screening early, so that they can start their research as soon as possible.
Therefore, please be aware in advance that, depending on the situation regarding the overall budget, details like resources to be allocated and other matters may be subject to change at a later stage.

Moreover, the major changes for FY2013 are as follows.

＜The major changes for FY2013＞

① The number of research categories that are funded from the fund system has been expanded from three to five.

From FY2011 on, for a part of the KAKENHI research categories, the "KAKENHI (Multi-year Fund)" has been established within JSPS. This "KAKENHI (Multi-year Fund)" is funded with subsidies provided by the Ministry of Education, Culture, Sports, Science and Technology(MEXT). In this way, an institutional reform entailing the "establishment of a fund system" in order to promote KAKENHI has started.

In addition to "Scientific Research (C)", "Challenging Exploratory Research" and "Grant-in-Aid for Young Scientists (B)", for which a reform of the multi-year KAKENHI (the establishment of a fund system) has been accomplished in FY2011, the establishment of a fund system for newly adopted "Scientific Research (B)" and "Grant-in-Aid for Young Scientists (A)" has been newly introduced in FY2012. (Up to 5 million yen of the total research budget is funded from the fund system.) (hereinafter called "KAKENHI(Partial Multi-year Fund)")

Moreover, due to the "establishment of a fund system", the spending rules and the receipt of funding will change. For example, the use of KAKENHI extending over more than one fiscal year will become possible. However, the previous purpose and character of the "KAKENHI" does not change and the details of the call for proposals (i.e. eligibility, total budget provided, research period and other matters) will not change either.

Furthermore, the research categories for which the current round of call for proposals is organized will be handled as in the following table. Please note that the handling of KAKENHI (Series of Single-year Grants), KAKENHI (Multi-year Fund) and KAKENHI (Partial Multi-year Fund) will be treated separately in the current text.

Table of Research Categories for the Current Round of Call for Proposals (Series of Single-year Grants, Multi-year Fund and Partial Multi-year Fund)

Research Category	KAKENHI (Series of Single-year Grants)	KAKENHI (Multi-year Fund)	KAKENHI (Partial Multi-year Fund)
Specially Promoted Research	All research projects (New and continued research projects)		
Scientific Research (S/A)	All research projects (New and continued research projects)		
Scientific Research (B)	Research projects adopted in FY2011 or before (Continued)		・Research projects adopted in FY2012 (Continued) ・The current round of call for proposals (New)
Scientific Research (C)	Research projects adopted in FY2010 or before (Continued)	・Research projects adopted in FY2011 or FY2012 (Continued) ・The current round of call for proposals (New)	
Challenging Exploratory Research	Research projects adopted in FY2010 or before (Continued)	・Research projects adopted in FY2011 or FY2012 (Continued) ・The current round of call for proposals (New)	
Grant-in-Aid for Young Scientists (A)	Research projects adopted in FY2011 or before (Continued)		・Research projects adopted in FY2012 (Continued) ・The current round of call for proposals (New)
Grant-in-Aid for Young Scientists (B)	Research projects adopted in FY2010 or before (Continued)	・Research projects adopted in FY2011 or FY2012 (Continued) ・The current round of call for proposals (New)	

※ Depending on the situation regarding the total budget, details, like resources to be allocated, and other matters may be subject to change at a later stage.

② The "List of Categories, Areas, Disciplines and Research Fields" has been revised.

Since FY2003 major revisions have been made to the "List of Categories, Areas, Disciplines and Research Fields".

When making these revisions, deliberations were conducted at the Research Grant Screening Section of the Section Meeting for Science of the Academic Deliberation Council for Science and Technology of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and based on these deliberations, decisions concerning the revisions were made.

③ Improvements have been made to Scientific Research on Innovative Areas.

(see "Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- FY2013 (MEXT)")

An improvement has been made so that researchers are allowed to apply and receive grants for two publicly invited research projects, while until now the limit was only one project. (It is however not permitted to apply and receive grants for projects in identical Innovative Areas.) The following standards have been established for the scale (number of projects and research budget) of the publicly invited research at the time of the application for "new innovative research areas".

- The minimum standard shall be 10 adopted projects, as a general indicator, or 10% or more of the research budget of the whole Innovative Area.
- Without adhering too strictly to the above-mentioned standards, efforts shall be made to provide for the appropriate number of projects and the appropriate amount of money while aiming at the extensive development of research in the Innovative Area in question, based on the purposes of Scientific Research on Innovative Areas and the characteristics of the Innovative Area in question.

Moreover, the following duplicate applications have become possible.

- Principal Investigator of planned research of Scientific Research on Innovative Areas and Principal Investigator of Scientific Research (S)
- Principal Investigator of planned research or publicly invited research of Scientific Research on Innovative Areas, on the one hand, and Co-Investigator (*kenkyū-buntansha*) of Specially Promoted Research, on the other.

④ For Grant-in-Aid for Young Scientists (B), it has become possible to select two research fields as desired areas for screening.

When applying for Grant-in-Aid for Young Scientists (B), it has become possible for researchers to select two research fields from the "List of Categories, Areas, Disciplines and Research Fields", if they desire screening in multiple areas for new and merged research plans.

○ Outline of the screening of research plans for which two research fields have been selected (plan)

- In the same manner as for research plans for which one research field has been selected, two-stage screening will be carried out.
- During the first stage of the screening, the first-stage screening committee members (judges) for "Grant-in-Aid for Young Scientists (B)" will carry out a document-based screening for each of the two selected research fields.
- During the second stage of the screening, a collegial screening will be carried out, based on the screening results of the first stage, by screening committee members (judges) who are different from the first-stage screening committee members. This collegial screening will take place in committees that are different from the committees that screen the research plans for which one research field has been selected. More specifically, these committees are, first, a committee for each of the four categories (i.e. Integrated Disciplines, Humanities and Social Sciences, Science and Engineering, Biological Sciences) that only screens research plans for which two newly established research fields have been selected and, secondly, a committee that carries out overall adjustments.

※For more details concerning the screening, please refer to "Rules concerning the screening and assessment for Grants-in-Aid for Scientific Research", which will be made public in early October.

Table of Contents

References
The Supplementary Volume has the following contents. Please use it for reference.

Supplementary Volume

Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- for FY2013 (Specially Promoted Research, Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)) (Application Forms and Data Entry)

1. Proposal for grant-in-aid

(1) Specially Promoted Research

Procedures for preparing and data entry of proposal for grant-in-aid (new/continued)

First Half, application information (Items to be filled in on the form on the website)
Application information (Items to be filled in on the form on the website) (screenshot)

Second Half, Files with Project Description

Form S-1-1 (1): Proposal for grant-in-aid "Specially Promoted Research" (new / English version)
Form S-1-1 (2): Proposal for grant-in-aid "Specially Promoted Research" (new / Japanese version)
Form S-1-2: Proposal for grant-in-aid "Specially Promoted Research" (continued)

(2) Research categories other than Specially Promoted Research

First Half, application information (Items to be filled in on the form on the website)
Application information (Items to be filled in on the form on the website) (Scientific Research (S/A/B/C), Challenging Exploratory Research and Grant-in-Aid for Young Scientists (A/B))
Preparation and data entry of application information
Application information (Items to be filled in on the form on the website) (screenshot)

Second Half, Files with Project Description (procedures for preparation and data entry of proposal for grant-in-aid, and form for proposal for grant-in-aid)

Form S-1-6: Proposal for grant-in-aid "Scientific Research (S)" (new)
Form S-1-7: Proposal for grant-in-aid "Scientific Research (A/B) (General)" (new)
Form S-1-8: Proposal for grant-in-aid "Scientific Research (C) (General)" (new)

Form S-1-9: Proposal for grant-in-aid "Scientific Research (A/B) (Overseas Academic Research)" (new)

Form S-1-10: Proposal for grant-in-aid "Challenging Exploratory Research" (new)

Form S-1-12: Proposal for grant-in-aid "Grant-in-Aid for Young Scientists (A)" (new)

Form S-1-13: Proposal for grant-in-aid "Grant-in-Aid for Young Scientists (B)" (new)

Form S-1-14: Proposal for grant-in-aid (continued)

2. Written consent of the Co-Investigator (*kenkyū-buntansha*)

KAKENHI (Series of Single-year Grants)

Form C-11: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for other institution)

Form C-12: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for same institution)

KAKENHI (Multi-year Fund)

Form F-11: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for other institution)

Form F-12: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for same institution)

KAKENHI (Partial Multi-year Fund)

Form Z-11: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for other institution)

Form Z-12: Written consent of the Co-Investigator (*kenkyū-buntansha*) (for same institution)

3. Notice of Completion of Grant-Aided Project

KAKENHI (Series of Single-year Grants)

Form U-1-1: Notice of Completion of Project Funded for FY2012

KAKENHI (Multi-year Fund)

Form U-1-2: Notice of Completion of Project Funded

KAKENHI (Partial Multi-year Fund)

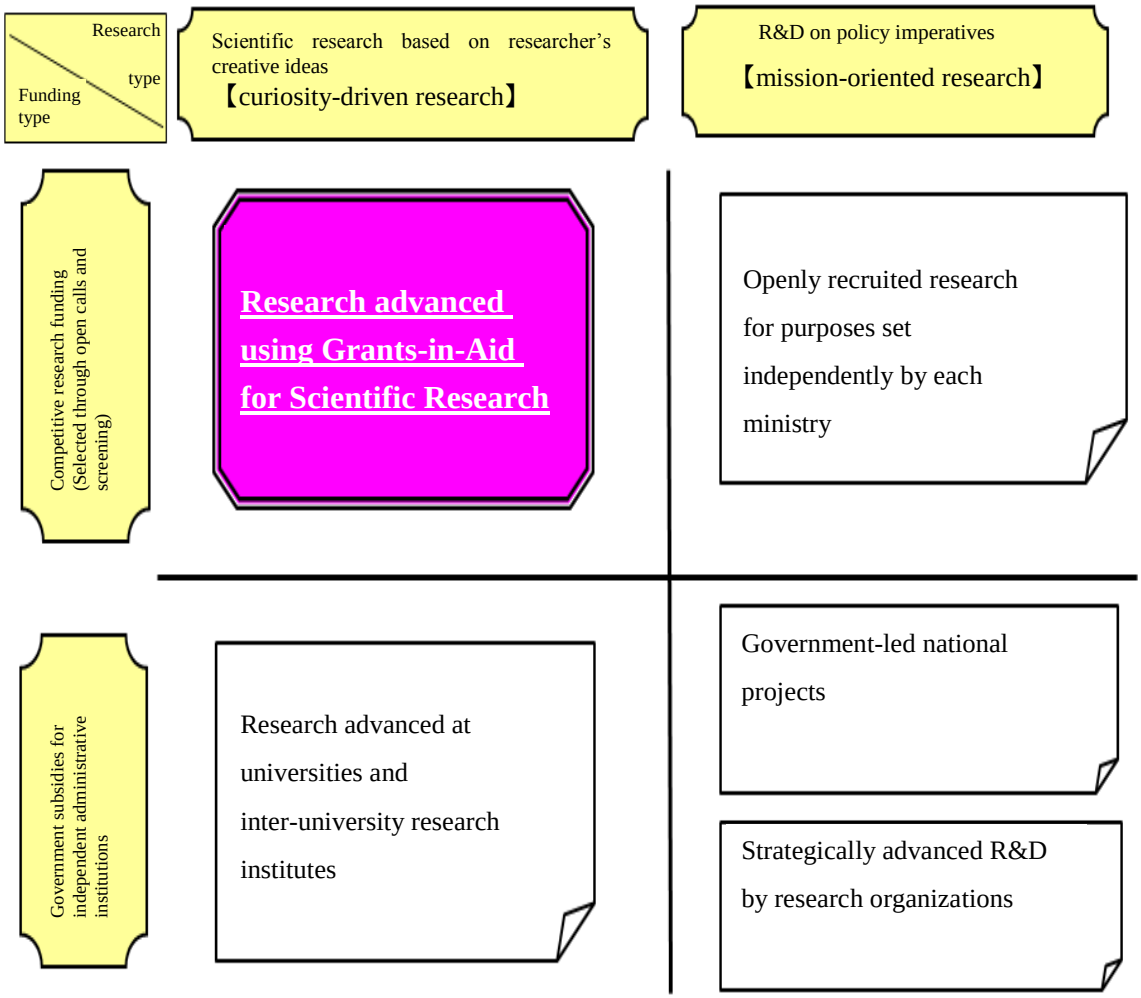
Form U-1-3: Notice of Completion of Project Funded for FY2012

I. Outline of the Grants-in-Aid for Scientific Research - KAKENHI

1. Purpose and Character of Grants-in-Aid for Scientific Research - KAKENHI

Grants-in-Aid for Scientific Research are competitive funds that are intended to significantly develop all scientific research (research based on the free ideas of the researcher), from basic to applied research in all fields, ranging from the humanities and the social sciences to the natural sciences. The grants provide financial support for creative and pioneering research projects that will become the foundation of social development. The research projects are selected using a peer-review screening process (screening by multiple researchers whose field of specialization is close to that of the applicant).

The position of "KAKENHI" in the policy on the promotion of science, technology and scientific research in Japan

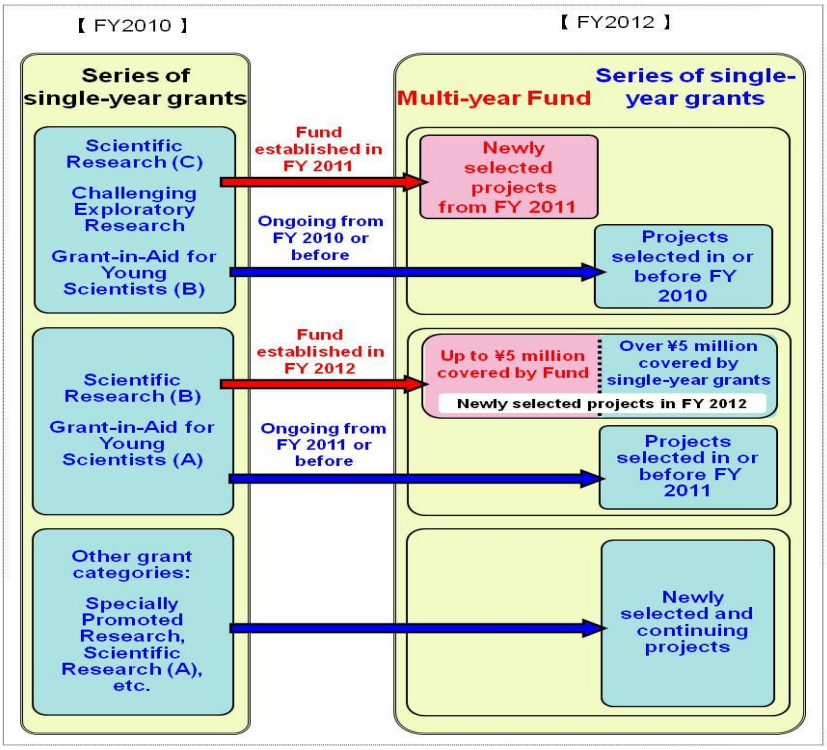


2. On the Establishment of a Fund System for the KAKENHI

From FY2011 on, for a part of the KAKENHI research categories, the "KAKENHI Multi-year Fund" has been established by JSPS. This "KAKENHI Multi-year Fund" is funded with subsidies provided by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). In this way, an institutional reform entailing the "establishment of a fund system" in order to promote KAKENHI Multi-year Fund Scientific Research Grants has started. In addition to "Scientific Research (C)", "Challenging Exploratory Research" and "Grant-in-Aid for Young Scientists (B)", for which a reform of the multi-year KAKENHI (the establishment of a fund system) was implemented in FY2011, the establishment of a fund system for newly adopted "Scientific Research (B)" and "Grant-in-Aid for Young Scientists (A)" has been newly introduced in FY2012. (Up to 5 million yen of the total research budget is funded from the fund system.)Through the establishment of a fund system, it has become possible after the adoption of a research project to use research funding ahead of schedule by modifying the original research plan, or to use research funding in the subsequent fiscal year without prior procedures, depending on the progress of the research. Moreover, it has become possible, among other things, to procure goods across fiscal years, when implementing the research funding.

Furthermore, from FY2011 on "Multi-year Fund Scientific Research Grants" (hereinafter called "KAKENHI (Multi-year Fund)") and the hitherto known Grants-in-Aid for Scientific Research (hereinafter called "KAKENHI (Series of Single-year Grants)") will be implemented together as "Grants-in-Aid for Scientific Research". All these grants will be called "KAKENHI". As for these new "KAKENHI", the previous purpose and character of the old type of "Grants-in-Aid for Scientific Research" does not change.

Image of Grants-in-Aid System



3. Research Categories

Depending on the content and the scale of the research, different research categories have been established.

Research categories, etc.	Purposes and description of the research category
Grants-in-Aid for Scientific Research	
Grant-in-Aid for Specially Promoted Research	Highly regarded research in the international arena that is likely to yield highly acclaimed research achievements (The period is three to five years. As a general indicator, the upper limit of the total budget provided is set around 500 million yen per research project. However, no upper and lower limits have been established.)
Scientific Research on Priority Areas ※	Research fields that will lead to the upgrading and enhancement of scientific research in Japan; research fields that require effort on a global scale; and/or research fields that have particularly strong social demand will be specified. The objective is to flexibly and effectively plan the promotion of research. (The period is three to six year. In principle, the budget is set at around 20 million to 600 million yen per fiscal year per field.)
Scientific Research on Innovative Areas ※	(Research in a proposed research area) New research areas that will lead to the upgrading and enhancement of scientific research in Japan. The new research areas are proposed by one researcher or by a group of researchers, and will develop through the effort to cultivate collective research, research personnel, etc. (The period is five years. In principle, the budget is set at around 10 million to 300 million yen per fiscal year per field.)

		(Research under a proposed research project) Innovative and challenging research that is very likely to lead to a breakthrough in academic research by the development of the research project in question. The funding is not restricted to research projects that are expected to yield certain and tangible research achievements. (The period is three years. The budget is 10 million yen per fiscal year.)
	Scientific Research	(S) Creative/pioneering research done by one researcher or a relatively small group of researchers (The period is five years. The budget ranges from 50 million yen to around 200 million yen per project.) (A)(B)(C) Creative/pioneering research done by one researcher or jointly by multiple researchers (The period is three to five years.) (Classified in A, B or C, depending on the total budget provided) (A) From 20 million to 50 million yen ◎(B) From 5 million yen to 20 million yen ★(C) 5 million yen or less
	Challenging Exploratory Research	Early-stage research that is based on a unique concept, that is challenging, and that sets a high goal (The period is one to three years. The budget is up to 5 million yen per project.) ★
	Grant-in-Aid for Young Scientists	(S) Research done by one researcher aged 42 or less (The period is five years. The budget ranges roughly from 30 million yen to 100 million yen per project.) (A)(B) Research done by one researcher aged 39 or less (The period is two to four years. Classified in A or B, depending on the total budget provided.) ◎(A) from 5 million yen to 30 million yen ★(B) 5 million yen or less
	Grant-in-Aid for Research Activity Start-up	Research done by one researcher who has just been employed by the research institution, by one researcher who returns from childcare leave or other kinds of leave, or other researchers. (The period is up to two years. The budget is up to 1.5 million per fiscal year.)
	Encouragement of Scientists	Research done by one person who is an employee of an educational/research institution, a company employee, or others
Grant-in-Aid for Special Purposes ※		Funding of urgent and important research projects.
Grant-in-Aid for Publication of Scientific Research Results		
	Publication of Research Results ※	Funding for publication or international dissemination of research achievements of a scientific society with high academic value
	Scientific Periodicals	Funding of academic journals that are periodically published by a scientific society, an association constituting a cooperative framework of a number of scientific societies, or other bodies, in order to contribute to international academic exchange
	Scientific Literature	Funding of Scientific Literature issued by an individual or a group of researchers to disclose scientific research achievements
	Databases	Funding of databases created by an individual or a group of researchers for public availability
Grant-in-Aid for JSPS Fellows		Funding of research done by JSPS Fellows, including Foreign JSPS Fellows (for a period of up to three years)

Note 1 The Ministry of Education, Culture, Sports, Science and Technology (MEXT) will conduct the screening of and provide funding for research categories marked with the sign ※.

Note 2 Within "Publication of Research Results", there are the application divisions "Publication of Research Results (B)" and "Publication of Research Results (C)".

Note 3 No new invitation for applications is conducted for "New Innovative Research Areas" of

"Scientific Research on Priority Areas", "Scientific Research on Innovative Areas (Research under a proposed research project)" and "Grant-in-Aid for Young Scientists (S)".

Note 4 Among the research categories marked with the sign ★ (Scientific Research (C), Challenging Exploratory Research and Grant-in-Aid for Young Scientists (B)), research projects that are newly adopted in FY2011 or later will be implemented using KAKENHI (Multi-year Fund).

Note 5 Among the research categories marked with the sign ◎ (Scientific Research (B) and Grant-in-Aid for Young Scientists (A)), research projects that are newly adopted in FY2012 (hereinafter called "KAKENHI (Partial Multi-year Fund)") will be implemented using KAKENHI (Multi-year Fund) (up to 5 million yen out of the total research budget).

4. The Relationship between MEXT and JSPS

The Ministry of Education (currently, the Ministry of Education, Culture, Sports, Science and Technology) publicly recruited, screened applications and delivered grants in all of the research categories up to FY1998. From FY1999 on, these tasks were transferred to the Japan Society for the Promotion of Science (JSPS). The call for proposals, screening and funding are currently being conducted as indicated below.

Research category	**Call for proposals, screening and funding** Main body in the preparation of the procedures for lodging applications and the location where the applications should be submitted. Main body handling the criteria for selection, notice of the decision, and the location where the application forms for grants and the various other necessary documents should be submitted
Scientific Research on Priority Areas, Scientific Research on Innovative Areas, Grant-in-Aid for Special Purposes, Grant-in-Aid for Publication of Scientific Research Results (Publication of Scientific Research Results (B/C))	MEXT
Specially Promoted Research Scientific Research, Challenging Exploratory Research, Grant-in-Aid for Young Scientists, Grant-in-Aid for Research Activity Start-up, Encouragement of Scientists, Grant-in-Aid for Publication of Scientific Research Results (Scientific Periodicals, Scientific Literature and Databases), Grant-in-Aid for JSPS Fellows	JSPS

❖ As of September 2012

5. Rules Relating to KAKENHI

KAKENHI (Series of Single-year Grants) are governed by the Law on Optimizing Implementation of Budgets Relating to Subsidies (Law No. 179, 1955), Procedures on the Handling of Grants-in-Aid for Scientific Research (Announcement of the MEXT), Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (Regulations No. 17, 2003), and Others.

The KAKENHI (Multi-year Fund) are governed by the "Basic Policy on the Management of the KAKENHI (Multi-year Fund)", Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (Rule No. 19, 2011) and others.

The KAKENHI (Partial Multi-year Fund) are governed by the Law on Optimizing Implementation of Budgets Relating to Subsidies (Law No. 179, 1955), Procedures on the Handling of Grants-in-Aid for Scientific Research (Announcement of the MEXT), the "Basic Policy on the Management of the KAKENHI (Multi-year Fund)", Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (Regulations No. 17, 2003), Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (Rule No. 19, 2011) and others.

(1) Three types of rules for KAKENHI

There are three types of rules for KAKENHI, as follows:

1) Application rules: rules concerning the applications
2) Assessment rules: rules concerning the preliminary assessment (screening), the interim assessment, the ex-post assessment, and the research project progress assessment
3) Utilization rules: rules concerning the use of KAKENHI

Moreover, these three sets of rules apply as follows, depending on whether the funding is granted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) or by the Japan Society for the Promotion of Science (JSPS).

		Application rules	Assessment rules	Utilization rules
Funding Granted by MEXT	KAKENHI (Series of Single-year Grants)	MEXT Procedures on the call for proposals	MEXT Rules concerning the assessment for Grants-in-Aid for Scientific Research Screening Outline for Grants-in-Aid for Scientific Research, category "Scientific Research on Innovative Areas" Assessment Outline for Grants-in-Aid for Scientific Research, category "Scientific Research on Innovative Areas"	MEXT For researchers: Supplementary conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)), to be performed by each research institution
Funding Granted by JSPS	KAKENHI (Series of Single-year Grants)	JSPS Procedures on the call for proposals	JSPS Rules concerning the screening and assessment for Grants-in-Aid for Scientific Research ※The screening and assessment rules for FY2013 are scheduled to be made public in early October.	JSPS For researchers: Supplementary conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)), to be performed by each research institution
	KAKENHI (Multi-year Fund)			JSPS For researchers: Funding conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)), to be performed by each research institution
	KAKENHI (Partial Multi-year Fund)			JSPS For researchers: Funding conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (new research projects of Scientific Research (B) and Grant-in-Aid for Young Scientists (A)), to be performed by each research institution

(2) Appropriate use of KAKENHI

KAKENHI are funded by the tax of citizens and other sources. Researchers receiving KAKENHI have a duty to comply with the related laws, regulations and utilization rules by researchers (subsidiary conditions or funding conditions), and also to use such grants appropriately. To ensure recipients comply with this requirement, we check whether no inappropriate use of KAKENHI will be made, when an application is made. (See note below.)

To facilitate the appropriate use of KAKENHI, research institutions to which the researchers belong are responsible for the management of the KAKENHI. The Administrative work that each research institution is required to carry out (rules for use for institutions) is determined.

Among other things, the research institution has the duty to secure the appropriate use of KAKENHI, for example, by setting up a system for the management and audit of the budget, and, for the expenditure of expenses for goods, by properly implementing inspections of delivered goods. In order to prevent fraudulent accounting through fictitious business transactions (so-called "*azukekin*"), it is important, in addition to appropriate inspection of delivered goods, to widely inform traders about the rules and to obtain the understanding and cooperation of traders in the prevention of this kind of fraudulent accounting. Researchers need to strictly respond to traders who have been involved in fraudulent accounting through fictitious business transactions, for example by stopping doing business with such traders.

Researchers and persons in charge in the research institution should fully understand prior to the application that these rules will apply after the application is approved.

(3) Important points on the use of KAKENHI

For KAKENHI (Series of Single-year Grants) a package plan throughout the research period should be prepared and submitted upon application. However, after the research project is adopted, it will be handled as a project which is funded for each fiscal year during the research period in question. For example, KAKENHI (Series of Single-year Grants) cannot be used to pay costs in a fiscal year which falls outside the fiscal year(s) in which the funded project should be carried out.

Moreover, when it can be expected that the funded project will remain unfinished within the fiscal year, due to reasons beyond the control of the applicant(s), which could not be foreseen at the time it was decided to grant the funding, the costs in question can be carried over to the next fiscal year, provided that a request for approval for the carry-over is submitted to the Finance Minister through the Minister of Education, Culture, Sports, Science and Technology (MEXT), and the approval from the Finance Minister is obtained.

For KAKENHI (Multi-year Fund), the research activity after the adoption of the grant will be handled as a single funded project throughout the whole research period. Therefore, it is possible to use the grant for paying costs in a fiscal year that is different from the fiscal year of receipt of the grant, if this happens within the research period.
Moreover, if within the research period an amount of money remains unused by the end of each fiscal year, except for the final fiscal year, costs can be carried over to the next fiscal year, without researchers having to go through prior authorization procedures. In addition, if an amount of money remains unused by the end of the final fiscal year, costs can be carried over to the next fiscal year, by obtaining prior approval for extension of the research period.

For KAKENHI (Partial Multi-year Fund), a package plan throughout the research period should be prepared and submitted upon application. However, after the research project is adopted, the period of the funded project consists of one single fiscal year for non-fund based grants, and multiple fiscal years for fund based grants. Based on this, researchers should appropriately conduct their funded project. Moreover, basically non-fund based grants follow the handling of KAKENHI (Series of Single-year Grants), and fund based grants follow the handling of KAKENHI (Multi-year Fund).

(4) The handling of a case in which the report on the research achievements has not been submitted

1) The report on the research achievements plays the important role of making the achievements of the research funded with a KAKENHI widely known to the citizens. It is an important tool in order to widely return the achievements of the research funded with a KAKENHI, which in turn has the tax of citizens and other sources as its resources, to society.

   Therefore, researchers should submit the report on the research achievements at the end of the research. The content of the research will be widely disclosed to the public via Database (KAKEN) of the National Institute of Informatics and other tools. Moreover, the research institution to which the researchers belong has to collect and submit the reports on the research achievements.

2) No funding of KAKENHI will be conducted for researchers who do not submit the report on the research achievements at the end of the research, without any reason. Moreover, it may happen that the decision to KAKENHI to the researcher in question is cancelled, or that an order to return the grant is issued. It may also happen that information, such as the name of the research institution to which the researcher in question belongs and other data, is made public.

Furthermore, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other KAKENHI due to be implemented in the same fiscal year will be suspended. Therefore, it is the responsibility of the representative of the research institution to ensure that the report on the research achievements is submitted without fail.

(5) Treatment in case of infringement of related laws

When a research project has been implemented, by violating related laws, guidelines, etc., for example when the content which is entered in the application documents is false, it is possible that the provision of KAKENHI is not carried out or cancelled.

(Note) Examples of recent fraudulent use, fraudulent receiving of grants or fraudulent acts committed during the research.

○ Fraudulent use

・Someone instructed a trader to complete a fictitious transaction, pretended to have purchased consumables, had KAKENHI expended by the university, and then had it managed as money deposited to the trader.

・Someone instructed a trader to complete a fictitious transaction, had a false invoice issued on which the name of a good that is different from the good that had actually been purchased and delivered was stated, and then had KAKENHI expended by the university.

・Someone had a work attendance sheet for work that was actually not carried out drawn up for a graduate student, charged the payment of remuneration, and then managed the money himself, as a pooled fund.

・Someone stayed in a destination different from the scheduled travel plan, in order to have a meeting on collective research unrelated to the purpose of the research project, and then put the costs under travel expenses associated with overseas travel.

(Note) The expenditure of KAKENHI for fictitious and other transactions, like the ones mentioned in the examples, are all considered fraudulent use, even if the expenditure of KAKENHI was intended for the research project related to the Grant-in-Aid for Scientific Research in question.

○ Fraudulent receiving of grants

・A researcher who was not eligible to apply or receive grants applied for a KAKENHI and for funding of it, and then fraudulently received the subsidy.

○ Fraudulent acts committed during the research

・Someone manipulated or forged experimental data or a chart in a research paper published as the achievements of research funded with a KAKENHI.

・Someone translated an original English-language research paper without obtaining prior consent from the author(s), incorporated this translation into a book or report on the research achievements published as the achievements of research funded with a KAKENHI, and made it public as the research achievements of the research project in question, without clearly mentioning that it was being quoted.

6. Guidelines on the Proper Implementation of Competitive Funding

The "Guidelines on the Proper Implementation of Competitive Funding" (agreement of the liaison meeting of related offices and ministries on competitive funding, dated September 9, 2005) agree on the rules in the field of competitive funding on the elimination of unreasonable reduplication and excessive concentration, fraudulent receiving, of grants, fraudulent use and research-related fraudulent acts in research papers, and other matters in the related offices and ministries.

During the implementation of the competitive funding, including KAKENHI, these matters will be dealt with appropriately, based on these Guidelines. Therefore, the applicant should consider carefully the following points.

(1) Eliminate Unreasonable Reduplication and Excessive Concentration

1) In order to avoid "Unreasonable Reduplication or Excessive Concentration" (*) of competitive funds, we may, to the extent necessary, share information on a part of the project description of the application between other divisions in charge of competitive funds, including other offices and ministries, independent administrative legal entities, etc, making use of the Cross-ministerial Research and Development management system (e-Rad).

   Therefore, in the case of an application for more than one competitive funding (including in the case of an application for more than one Research Categories for KAKENHI), and other matters, the applicant should be careful when preparing the Proposal for Grant-in-Aid so that, for example, he or she fills in the Title of the Proposed Project in a way that makes it clear that it does not entail unreasonable reduplication.

   If unreasonable reduplication or excessive concentration is found, KAKENHI may not be delivered.

2) Researchers whose research has been adopted for the "Funding Program for Next Generation World-Leading Researchers (NEXT Program)" and who are implementing their research and development can apply for KAKENHI. However, they should keep in mind that they need to discontinue the NEXT Program upon obtaining the approval from JSPS, if they implement the research funded by a KAKENHI after adoption of their application.

3) Concerning the completed information on the condition of applications and receiving of other Competitive Funding and other matters, including from other offices and ministries, when preparing the Proposal for Grant-in-Aid (name of Research Funds, Title of Proposed Project,

Research period, Effort, etc.), if the stated information turns out to be different from the facts, the Research Project will not be adopted, the adoption will cancelled, or the allotted research budget will be reduced.

Moreover, concerning the "Effort", and other matters, necessary for the activity to build a center in the program called "World Premier International Research Center Initiative", it is necessary to fill in the Proposal for Grant-in-Aid. Therefore, when completing this document, the applicant should verify the "Procedures for Preparing and Entering a Proposal".

(2) Dealing with Fraudulent Use, Fraudulently Received Grants or Fraudulent Acts Committed During the Research

1) **No KAKENHI will be offered, for a fixed period of time, when the researcher has made fraudulent use of KAKENHI, has fraudulently received KAKENHI, or has committed fraudulent acts.** (For details see "(Reference 2) Procedures on the Handling of Grants-in-Aid for Scientific Research", "(Reference 3) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research – KAKENHI (KAKENHI (Series of Single-year Grants))" and "(Reference 4) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research – KAKENHI (KAKENHI (Multi-year Fund))".) Moreover, for research projects of which it has been established that fraudulent use, fraudulent receipt of grants or fraudulent acts have taken place, researchers may be requested to completely or partially return the KAKENHI in question.

Also researchers who fraudulently use or receive competitive funds other than KAKENHI (including funds under the control of other ministries), or who commit fraudulent acts by means of these competitive funds, and therefore are excluded from receiving these funds in question, for a fixed period of time, will not receive KAKENHI for a fixed period of time.

Moreover, the researcher who falls in those categories may experience difficulties when applying for other competitive funds, since an outline of the inappropriate use of grants, the inappropriate receiving of grants and/or the inappropriate acts in question (containing an outline of the research achievements in the research institution, the names of the people involved, the institution they belong to, the research project, the budget, the fiscal year of the research, the inappropriate content, details of the measures taken, etc.) will be provided to other bodies in charge of competitive funds, starting with the other ministries, including independent administrative legal entities and other institutions allocating grants.

2) If it has been established that fraudulent acts have taken place in a research paper, a report, or

other research output funded by KAKENHI, the researcher will be treated in the same way as stated in the above-mentioned 1). The severity of the fraudulent acts and other matters will be taken into consideration.

Moreover, a person who is determined to have a certain responsibility, because, for example, he or she neglected his/her duty of care as a person in charge of the paper, report, etc. in question, will be treated in the same way, even if it has not been established that he or she was directly involved in the fraudulent acts.

(*) Eliminate Unreasonable Reduplication and Excessive Concentration

"Guidelines on the Proper Implementation of Competitive Funding" -Extract-
(Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Funding, Dated September 9, 2005 (Revision: March 27, 2009))

2. Eliminate Unreasonable Reduplication and Excessive Concentration

(1) Basic Policy of the Unreasonable Reduplication and Excessive Concentration

① In these guidelines, "Unreasonable Reduplication" is a situation in which more than one competitive funding is needlessly and repeatedly allotted to one and the same research project (i.e. the title and the content of the research to which competitive funding is being allotted; the same applies below) carried out by one and the same researcher. Either of the following cases fall under "Unreasonable Reduplication".

- **○Cases where applications have been made at the same time for more than one competitive funding for substantively the same research project (including research projects that overlap to a considerable degree; the same applies below), and where these research projects are redundantly adopted .**
- **○Cases where an application has been made again for substantively the same research project as another project that has already been adopted, and for which the allotment of competitive funding has already been completed.**
- **○Cases where there is a reduplication of the use research funds among more than one research project.**
- **○Other cases corresponding to the cases mentioned above.**

② In these guidelines, "Excessive Concentration" is a situation in which the entire research funds that are allotted to one and the same researcher or research group (hereinafter called "researcher, etc.") in the fiscal year in question exceeds the limit within which they can be used effectively and efficiently, and in which the research funds cannot be used within the research period. Either of the following cases fall under "Excessive Concentration".

- **○Cases where, in the light of the abilities of the researcher, etc. and the research methods, etc., excessive research funds are allotted.**
- **○Cases where, in comparison with the effort (the time allocation rate (%) of time necessary for the implementation of the research activities with the entire working time of researcher) that is being allotted to the research project in question, excessive research funds are allotted.**
- **○Cases where the purchase of unnecessarily expensive equipment is carried out.**
- **○Other cases corresponding to the cases mentioned above.**

7. On the Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Course of Action)

For KAKENHI, it has, until now, clearly been mentioned in the utilization rules by researchers (subsidiary conditions or funding conditions), the Handbook for KAKENHI, and other materials, that the expenses for the creation of a homepage for the publication of the research achievements, the expenses for the creation of a pamphlet publicizing research achievements, the expenses associated with outreach activities, such as, for example, activities publicizing the research achievements among the general public, can be paid as direct costs. Moreover, researchers must endeavor to positively disseminate the achievements produced through KAKENHI to society and citizens. For example, it is requested that researchers mention information concerning outreach activities in the report on the research achievements they are requested to prepare after the completion of the research period.

Furthermore, JSPS has implemented the program "HIRAMEKI ☆ TOKIMEKI SCIENCE" in order to introduce the newest research achievements to elementary school, junior high-school and senior high-school pupils, in an easy-to-understand form, through experiences, experiments and lectures. Researchers are invited to make use of this program.

Moreover, in "*On the Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Course of Action)*" (June 19, 2010, the Minister of State for Science and Technology Policy and the Experts of the Council for Science and Technology Policy) which has been compiled in June 2010, the activity in which researchers explain the content and achievements of their research activities to society and citizens in an easy-to-understand form is placed in the above-mentioned 'Dialogue on Science and Technology with Citizens'. Researchers and other persons who have received an allotment of public research funds amounting more than 30,000,000 yen per year per case are requested to positively work on the 'Dialogue on Science and Technology with Citizens'. Universities and other research institutions are also requested to make positive efforts in order to enable the proper implementation of the Dialogue on Science and Technology between Citizens, on the one hand, and researchers and other persons who have received public research funds, on the other hand, for example, by setting up support systems.

For KAKENHI, there is the question "Are you positively trying to publicize and disseminate the research content and research achievements?", especially in the research progress assessment of, for example, Specially Promoted Research, for which researchers receive a relatively high amount of research funds, and the interim assessment of, for example, Scientific Research on Innovative Areas (Research in a proposed research area). Therefore, based on the above-mentioned Basic Course of

Action, researchers should disseminate the achievements of research funded with KAKENHI to society and citizens in an even more positive way.

8. Cooperation with the National Bioscience Database Center

The National Bioscience Database Center (http://biosciencedbc.jp/) has been established in the Japan Science and Technology Agency (JST, an independent administrative legal entity) in April 2011, in order to promote the integrated use of databases in the area of life science that have been created by various research institutions and other institutions.

This Center spurs the active participation of related institutions, and based on four pillars, namely (1) the planning of strategies, (2) creation and operation of portal websites, (3) research on and development of core technology for the integration of databases and (4) the promotion of the integration of biotechnology-related databases, it is promoting projects aiming at the integration of databases in the area of life science. In this way, through wide sharing and utilization in the researchers community of the research achievements in the area of life science produced in Japan, the Center aims at invigorating overall research in the area of life science, including research and development connected to basic research and industrial applied research.

JSPS would like to request researchers to cooperate by providing to the Center copies of raw data related to achievements published in research papers and other output in the area of life science, or copies of created open databases.

Moreover, the copies provided will be able to be utilized on a non-exclusive basis as reproductions, alterations, or in other necessary forms. Furthermore, JSPS would like researchers to understand in advance that, in response to requests of the institutions that received copies, it would also like request researchers to cooperate by providing all the information necessary for utilizing the copies.

Please direct inquiries to:
Japan Science and Technology Agency, National Bioscience Database Center
Tel. 03-5214-8491

II. Details of the Call for Proposals

A call for proposals for "Grants-in-Aid for Scientific Research KAKENHI" will be conducted together for hitherto known Grants-in-Aid for Scientific Research (hereinafter called "KAKENHI (Series of Single-year Grants)") and Multi-year Fund Scientific Research Grants (hereinafter called "KAKENHI (Multi-year Fund)").

The current round of call for proposals opens before the finalization of the budget for FY2013 in order to enable researchers to proceed with their preparations for the screening early, so that they can start their research as soon as possible.

Therefore, please be aware in advance that, depending on the situation regarding the overall budget, details like resources to be allocated and other matters may be subject to change at a later stage.

1. Research Categories for which a Call for Proposals is Organized

The following shows the research categories for which the Japan Society for the Promotion of Science is organizing a call for proposals:

Specially Promoted Research, Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)

※ For Grant-in-Aid for Young Scientists (S) no call for proposals will be conducted.

2. Schedule from Application to Receipt of Funding

(1) Procedures that need to be completed prior to the deadline for the submission of the application documents

Principal Investigator should sufficiently cooperate with the research institution, and should adequately respond to its requests.

The Date and Time	Procedures to be Performed by the Principal Investigator (See "Ⅲ Instructions & Procedures for those Intending to Apply" and "Ⅳ Instructions & Procedures for those Who Have Already Been Accepted")	Procedures to be Performed by the Research Institution (See "Ⅴ Instructions & Procedures for Staff of the Research Institution")
From September 1, 2012 Start of the Call for Proposals		Procedures to be completed, if the need arises 1) The Research Institution obtains "An Electronic Certificate for Research Institutions, an ID, or Password" for e-Rad from the person in charge of the operation of e-Rad (This does not apply if the research institution already obtained them.) ※The issue of the ID and the Password takes about 2 weeks. 2) Registration of the Researcher Information in e-Rad and other matters 3) Research institutions issue an "ID and password" to the Principal Investigators. (This does not apply if the researcher already obtained an ID and a password.)
	①Preparing the Application Investigators should access the Electronic Application System using the ID and the e-Rad Password which has been provided by the research institution to which they belong and preparing the application. ② Submission (Sending) of the Application Documents The Principal Investigator should submit (send) the application documents to the research institution he/she belongs to, by the deadline decided the research institution.	4) Submission of Submission of the "Self-assessment Checklist on the Implementation of the System", based on the Guidelines. (Deadline for submission: October 5 (Fri.)) 5) Submission (Sending) of the Application Documents
November 9 (Fri) 4:30 pm **Deadline for the Submission**		

Notes:

1. After the Principal Investigator submit (Sending) to the application to the research institution (mentioned in "Procedures to be Performed by the Principal Investigator" ②), the research institution should submit (Sending) to the JSPS the application the application by the deadline for the submission (mentioned in "Procedures to be Performed by the Research Institution" 5)).

   Next, he or she should verify the section "Preparing the Application and Submitting the Application" (pages 41-51), etc., as well as verify the procedures designated by the research institution, etc. (deadline for the submission of the application, etc., in the research institution), with the office worker in charge in the research institution.

2. Research Institutions should be aware that there is a validity period for the e-Rad Electronic Certificate, and that this validity period is three years, starting from the issue date. Research Institutions should verify the validity period of the e-Rad Electronic Certificate that they are using at present, and if the end of the validity period is approaching, or if the validity period has expired, they should without fail conduct renewal procedures and other procedures. For methods of verification of the validity period of e-Rad Electronic Certificates, methods of renewal procedures, and other matters, Research Institutions should verify the section "Electronic Certificate Renewal" of the e-Rad website (http://www.e-rad.go.jp/shozoku/certificate/index.html).

   When the researcher is applying for KAKENHI, he or she should register the researcher information beforehand in e-Rad. The research institution should perform the registration in e-Rad. Therefore, the researcher who is planning

to apply should verify the state of the registration with the office worker in charge in the research institution.

3. The research institution should submit a "Self-assessment Checklist on the Implementation of the System", based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" (section 4 in "Procedures to Be Completed by the Research Institution"). If it has not been submitted, the applications of researchers belonging to the research institution in question will not be accepted in the Electronic Application System.

(2) Schedule after the Submission of the Application Documents (plan)

Specially Promoted Research	Scientific Research (S)	Scientific Research (A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)
December 2012 to April 2013: Screening Late April 2013: Informal decision to grant the funding Middle of May: Application for funding Late June: Decision concerning the granting of the funding Middle of July: Remittance (part of the first term) ※ Around October: Remittance (part of the second term) ※	December 2012 to May 2013: Screening Late May 2013: Informal decision to grant the funding Middle of June: Application for funding Late June: Decision concerning the granting of the funding Middle of July: Remittance (part of the first term) ※ Around October: Remittance (part of the second term) ※	December 2012 to March 2013: Screening Early April 2013: Informal decision to grant the funding Late April: Application for funding Late June: Decision concerning the granting of the funding Middle of July: Remittance (part of the first term) ※ Around October: Remittance (part of the second term) ※

※ From FY2012 on, the amount requested for funding (direct costs) will be remitted separately in two installments, i.e. one during the first term (from April until September) and the other during the second term (from October until March), if this amount for the fiscal year in question is 3 million yen or more, and it will be remitted in a lump sum during the first term, if it is less than 3 million yen.

3. Details of Each Research Category

1) Specially Promoted Research: KAKENHI (Series of Single-year Grants)

A) Intended for: **Research project carried out by one researcher or by a relatively small group of researchers that is likely to yield highly acclaimed research achievements through intensive funding. The goal of the funding is the increased promotion of research which is highly regarded in the international arena.**

B) Total budget provided **(total budget throughout the research period the same applies below):**

As a general indicator, the upper limit of the total budget provided per research project is fixed at around 500 million yen. However, if it is deemed necessary, applications exceeding this amount are also possible. Moreover, no lower limit has been established.

※ Handling of research projects with a total budget exceeding 500 million yen

If the total budget exceeds 500 million yen, the reason why such a budget is needed should be stated in detail in the appropriate section of the proposal for grant-in-aid. Especially rigorous screening on the appropriateness of the budget will be conducted.

※ On the lower limit of total budget

No lower limit of the total budget has been established for research categories that further promote research which is highly regarded in the international arena and that are likely to yield highly acclaimed research achievements.

C) Research period: **Three to five years**

D) Number of research projects scheduled to be selected: **Around 10 (subject to strict selection)**

E) Research funding: **KAKENHI (Series of Single-year Grants) are granted.**

F) Important points: For research projects that have been adopted, a research progress assessment will be conducted in the fiscal year before the final fiscal year of the research period (or, for research projects of which the research period is 3 years, in the final fiscal year). Moreover, based on the results of this research progress assessment, an increase or a reduction of the research budget, cancellation of the research, or other measures may subsequently be implemented, if the need arises. Moreover, a follow-up assessment will be conducted 5 years after the completion of the research.

2) Scientific Research (S): KAKENHI (Series of Single-year Grants)

A) Intended for: **Research project performed by one researcher or by a relatively small group of researchers, with the purpose of achieving a major development in creative and pioneering research, based on past research achievements**

B) Total budget provided: **From 50 million yen to around 200 million yen**

C) Research period: **Five years as a general rule**

※As an exception, the research period may be set at three or four years, in case any of the researchers are expected to leave the research institution, due to reaching retirement age, or for any other reason.

D) Research funding: **KAKENHI (Series of Single-year Grants) are granted.**

E) Important points: For research projects that have been adopted, a research progress assessment will be conducted in the fiscal year before the final fiscal year of the research period (or, for research projects of which the research period is 3 years, in the final fiscal year). Moreover, based on the results of this research progress assessment, an increase or a reduction of the research budget, cancellation of the research, or other measures may subsequently be implemented, if the need arises.

3) Scientific Research (A/B/C)

Scientific Research (A): KAKENHI (Series of Single-year Grants)
Scientific Research (B): KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)
Scientific Research (C): KAKENHI (Multi-year Fund)

A) Intended for: **Research project done by one or by multiple researchers, with the purpose of achieving a major development in creative and pioneering research**

B) Total budget provided: Applications are to be divided into the following three divisions, according to the total budget provided.

Division	Total budget provided	Screening division
Scientific Research (A)	**between 20 million and 50 million yen**	General / Overseas Academic Research
Scientific Research (B)	**between 5 million and 20 million yen**	General / Overseas Academic Research

Scientific Research (C)	**5 million yen or less**	General

C) Research period: **Three to five years**

D) Screening division: When applying, select one of the following screening divisions, because the criteria of the screening are different depending on the nature of the research project for which the applicant applies.

Screening division: "General"

The screening division accepts applications relating to **Scientific Research (A/B/C)**. It is intended for projects which will develop innovative research.

All applications should be made for this screening division, except for research projects which are classified as "Overseas Academic Research".

Screening division: "Overseas Academic Research"

This screening division only accepts applications for **Scientific Research (A/B)**. It is intended for research projects having as their **major purpose** in terms of research subject and research methods **conducting a field survey, observation, or collecting data at a specific location overseas.**

If a field survey, or a similar survey, is not the main purpose of the project, please apply for the "General" screening division. As far as equipment is concerned, the use of grants in the "Overseas Academic Research" screening division is limited to equipment that is directly used for surveys, observation or collection of data overseas, excluding inexpensive personal computers.

E) Research funding: **For Scientific Research (A), KAKENHI (Series of Single-year Grants) are granted. For Scientific Research (B), KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund) are granted. For Scientific Research (C), KAKENHI (Multi-year Fund) are granted.**

4) Challenging Exploratory Research: KAKENHI (Multi-year Fund)

A) Intended for: **Research project at an exploratory stage, done by one or multiple researchers, that is based on a unique concept, that is challenging, and that sets an ambitious goal.**

B) Total budget provided: **5 million yen or less**

C) Research period: **One to three years**

D) Research funding: **KAKENHI (Multi-year Fund) are granted.**

5) Grant-in-Aid for Young Scientists (A/B)

Grant-in-Aid for Young Scientists (A): KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)
Grant-in-Aid for Young Scientists (B): KAKENHI (Multi-year Fund)

A) Intended for: **A research project conducted by one researcher aged 39 or less as of April 1, 2013 (a person born on April 2, 1973, or thereafter) with an original idea that is expected to bring forth a major development in the future**

B) Total budget provided: Applications are to be divided into the following two divisions, depending on the total budget provided

Division	Total budget provided
Grant-in-Aid for Young Scientists (A)	**From 5 million yen to 30 million yen**
Grant-in-Aid for Young Scientists (B)	**5 million yen or less**

C) Research period: **Two to four years**

D) Research funding: **For Grant-in-Aid for Young Scientists (A), KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund) are granted. For Grant-in-Aid for Young Scientists (B), KAKENHI (Multi-year Fund) are granted.**

E) Important points: On the "Restriction on the Number of Times of Receiving a Grant(*)" and transitional measures.

From the call for proposals of FY2010 on, JSPS decided to introduce a limitation on the number of times applicants can receive grants through Grant-in-Aid for Young Scientists (S/A/B). JSPS has decided that applicants can only receive grants twice for any of the research categories, through Grant-in-Aid for Young Scientists (S/A/B).

In addition, between now and the call for proposals of FY2013, JSPS decided to establish the following transitional measures.

○ Even if the number of times an applicant received a Grant-in-Aid for Young Scientists (S/A/B) at the time of the call for proposals of FY2010 is two times or more, he or she can apply and receive a grant one time for one of the research categories Grant-in-Aid for Young Scientists (A) or Grant-in-Aid for Young Scientists (B) within the set period of transitional measures, if he or she does so within the range of the age limits.

(*) “Receiving a grant” means being selected as a Grant-in-Aid for Young Scientists (S/A/B) “Receiving a decision concerning the granting of the funding” here.

In addition, even if a research project of which the research period goes over more than one fiscal year received a decision concerning the granting of the funding, under one and the same project number, the “Number of Times of Receiving a Grant” will be considered as “one time”.

Therefore, if, for example, researcher A conducted research from FY2003 to FY2004 with a “Grant-in-Aid for Young Scientists (B) (project number: 15******)”, and is conducting research from FY2006 to FY2009 with a “Grant-in-Aid for Young Scientists (A) (project number: 18******)”, the “Number of Times of Receiving a Grant” will be considered as “two times”.

Moreover, in both the following cases, the “Number of Times of Receiving a Grant” will be considered as “one time”.

- Cases where the researcher declined the application for funding in the middle of the research period, or where he or she discontinued the research, after he or she received a decision concerning the granting of the funding.
- Cases where the researcher applied during Grants-in-Aid for Scientific Research FY2006 for a “Grant-in-Aid for Special Purposes (Trial of Multiple Applications per Year)” with a research plan suitable for a “Grant-in-Aid for Young Scientists”, where that application was adopted, and where the researcher received the decision concerning the granting of the funding.

(Reference) Please note that the following cases do not contain a “Number of Times of Receiving a Grant”.

- In cases where, after the researcher received an informal decision to grant the funding for new research projects, he or she refused the application for funding, and did not receive the decision concerning the granting of the funding, there is no “Number of Times of Receiving a Grant”. (This also includes cases where the researcher declines the grant, after he or she suspended the application for funding.)
- For Continued Research Projects of the category “Grant-in-Aid for Young Scientists (B)” in FY2002 (projects that have been newly approved in FY2001 as “Encouragement of Scientists (A)” with project number “13******”) there is no “Number of Times of Receiving a Grant”, even if the researcher would have received the decision concerning the granting of the funding.

III. Instructions & Procedures for those Intending to Apply

A call for proposals for “Grants-in-Aid for Scientific Research KAKENHI” will be conducted together for hitherto known Grants-in-Aid for Scientific Research (hereinafter called “KAKENHI (Series of Single-year Grants)”) and Multi-year Fund Scientific Research Grants (hereinafter called “KAKENHI (Multi-year Fund)”).

1. Procedures to be Completed Prior to the Application

Three matters need to be completed before the application: (1) Verification of the Eligibility to Apply, (2) Verification of the Registration of the Researcher Information, (3) Obtaining an ID and Password to Use the Electronic Application System.

(1) Verification of the Eligibility to Apply

A qualified person should apply for a Grant-in-Aid for Scientific Research as a Principal Investigator.

Applicants should meet the requirements 1) and 2) below.

Moreover, if a qualified applicant belongs to more than one research institution, he or she can apply simultaneously from each of these research institutions. However, in that case, it is necessary to consider the rules on duplicate applications (see page 28).

In addition, JSPS Fellows and Foreign JSPS Fellows cannot apply for "Grant-in-Aid for Scientific Research".

Students, such as, for example, graduate students, cannot apply for Grants-in-Aid for Scientific Research. (See note.) Therefore, applicants should bear in mind that, students cannot apply, even if they hold a position in which they conduct research activities in the research institution to which they belong or in another research institution.

(Note) Persons who have a position consisting of conducting research activities in the research institution to which they belong, as their main work (e.g., university teaching staff, researchers from companies, etc.), and who also have a student status are not included in the term “student”.

① **At the time of the application, a person needs to be recognized by the research institution (Note) to which he or she belongs to be a researcher who meets the requirements 1) , 2) and 3) below, and needs to be a researcher whose Researcher Information has been registered in e-Rad as "Eligible to Apply for Grants-in-Aid for Research".**

Requirements

1) **The researcher should belong to the research institution as a person who has *inter alia* the duty to perform research activities within the research institution in question** (irrespective of whether the work is paid or unpaid, full-time of part-time. Moreover, it is not necessary for the researcher to perform these research activities as such as his or her main duty.)

2) **The researcher should actually be engaged in research activities at the research institution in question**(This does not apply to cases where he or she is only engaged as a research assistant.)

3) **The researcher is not a graduate student or any other category of student.** (However, this does not apply to persons who have a position consisting of conducting research activities in the research institution to which they belong, as their main work (e.g., university teaching staff, researchers from companies, etc.), and who also have a student status.)

Note: Research institutions as prescribed in Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research (announced by the Ministry of Education)

(Reference) Requirements that need to be met by the research institution (see page 100)

Requirements

- If a KAKENHI is given, the research activity should be conducted as an activity of the research institution in question.
- If a KAKENHI is given, the research institution should carry out the management of the KAKENHI.

② **A person should not fall under "Not eligible for receipt of funding" in FY2013, because he or she committed fraudulent use, fraudulent receiving of grants or fraudulent acts of/with Grants-in-Aid for Scientific Research or other competitive funding.**

Persons who are employed through KAKENHI (hereinafter called "research grant employees"), as a rule, need to concentrate on work related to a KAKENHI at their place of employment (hereinafter called "employment related work") according to their employment contracts. Therefore, considering the working hours they need to allot to the employment related work, they cannot apply for KAKENHI themselves.

However, if they provide a clear explanation on the time they can spend besides their employment related work, and if during this time they themselves attempt to conduct research using a KAKENHI, on their own initiative, it is possible for them to apply for KAKENHI, on condition that the following points have been verified in the research institution.

- It has been determined in the employment contract that research grant employees themselves can conduct research on their own initiative, besides the employment related work.
- The employment related work and the work devoted to research that they conduct themselves on their own initiative has clearly been divided in the working hours and the effort.
- Time that can be allotted to research which they attempt to conduct themselves on their own initiative has sufficiently been secured, besides the time spent for employment related work.

In addition, it may happen to researchers that they are treated as indicated below, even if their researcher information has been registered in e-Rad as "Eligible to Apply for KAKENHI".

- If it is judged in the research institution to which researchers belong that it is not appropriate to let them conduct their research activities as activities of the research institution in question, it may happen that the research institution does not recognize the application. It may also happen that the application for funding by these researchers in question is not recognized and that the application for funding of the KAKENHI is rejected.
- No KAKENHI will be funded, if there is a new application for Grants-in-Aid for Scientific Research from researchers who do not submit the report on the research achievements at the end of the research, without any reason, even if their research has been adopted after screening. Moreover, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other Grants-in-Aid for Scientific Research due to be implemented in the same fiscal year will be suspended.

(2) Verification of the Registration of the Researcher Information in e-Rad

A Principal Investigator who tries to apply for research categories for which a call for proposals is organized this time should be a person who is eligible to apply at the time of the deadline for the submission of the application documents, and should be a person whose researcher information is registered in e-Rad as "Eligible to Apply for KAKENHI".

Therefore, **when applying, it is necessary to first perform a verification of the content of the registration in e-Rad.**

Regarding the registration in e-Rad, in order for the research institution to which the Principal Investigator belongs to conduct the procedures in e-Rad, he or she should verify concerning the registration procedures to be conducted by the research institution to which he or she belongs (registration deadline within the research institution, methods of verification of the current state of the registration, etc.) with the research institution to which he or she belongs. (If there is any item (such as "the institution", "the position", or others) that needs to be corrected, even though he or she has already been included in e-Rad of the research institution, the applicant needs to register the correct information on e-Rad.)

(3) Obtaining an ID and a Password to Use the Electronic Application System

When applying, it is necessary to login into e-Rad, to access the Electronic Application System, and to prepare the application documents.Therefore, the applicant should first be **provided with an ID and a password for e-Rad** by the research institution.

Moreover, once the ID and the password have been provided they can be used, unless the research institution changes. In addition, Researchers who already obtained an ID and a password issued by e-Rad do not need to obtain it again.

(Reference) On "Grant-in-Aid for Research Activity Start-up"

The "Grant-in-Aid for Research Activity Start-up" is aimed at supporting persons who cannot apply for the call for proposals this time, such as researchers who have just been employed by their research institutions, researchers who return from childcare leave or other kinds of leave, or other researchers.

The FY2013 call for proposals for this research category is scheduled for March 2013, and the eligibility to apply is scheduled to be as follows.

① Persons who could not apply for a research category, because they became eligible to apply for KAKENHI on the day after the application deadline (November 9, 2012) for the research categories (*1) for which the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Society for the Promotion of Science (JSPS) organized a call for proposals in September 2012.

② Persons who could not apply for the research categories (*1) for which the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Society for the Promotion of Science (JSPS) organized a call for proposals in September 2012, because they took up maternity leave or childcare leave in FY2012.

(Applicants should verify the details in the Application Procedures of March 2013.)

The research institution is responsible for conducting the registration of the researcher information and other matters in e-Rad. Therefore, researchers who may come to fall under the above-mentioned point ①, should respond appropriately and, for example, contact the office worker in charge in the research institution.

(*1) Among the Grants-in-Aid for Scientific Research for FY2013 there are "Scientific Research on Innovative Areas", "Specially Promoted Research", "Scientific Research", "Challenging Exploratory Research" and "Grant-in-Aid for Young Scientists".

2. Verification of the Restrictions on Duplication

Before preparing the application forms, researchers who would like to apply for KAKENHI need to sufficiently verify the rules for "restrictions on duplication" in order to find out whether it is possible to apply for the research category they would like to apply for.

(1) Restrictions on Duplication in the Basic Policy

In the KAKENHI different "Research Categories" and "Screening Divisions" have been made, based on the scale of the research, the content, and other factors, This makes it possible to apply for research projects that meet the demands of various research forms.

On the other hand, taking into consideration the necessity to support many excellent researchers with limited resources, the danger of negatively affecting the operation of proper reviewing by an increase in the number of applications, and other elements, "Rules for Restrictions on Duplication" have been set up, based on the following fundamental principles.

① Making sure that as many excellent researchers as possible are supported with limited resources.
② Making sure that the number of applications does not increase dramatically, based on the reviewing system of each research category.
③ When setting up restrictions, primarily making the Principal Investigator who bears all responsibility eligible for the implementation of research projects, but also making the Co-Investigator (*kenkyū-buntansha*) eligible in some cases, for example, if the amount of funds in a research category is large.
④ Based on the fundamental principles outlined above, taking into consideration the purpose, character, and other elements of the "Research Categories" of the Grants-in-Aid for Scientific Research, and setting up restrictions on duplication separately, by making a distinction between the restrictions on application or restrictions on receiving of funds.

Restrictions on duplication have also been established in the research categories for which a call for proposals is organized this time. Therefore, when applying, the applicant should sufficiently verify the description below and the "Table of Restrictions on Duplication" showed on pp.35-40.

Moreover, if a research project falls under the concept "unreasonable reduplication" as shown in the "Guidelines on the Proper Implementation of Competitive Funding" (cf. p. 13), it is likely to be judged to be "unreasonable reduplication" in the stage of the screening. Therefore, when preparing the Proposal for Grant-in-Aid, the applicant should take this into account.

(2) Restrictions on Duplicate Applications

① Cases where a researcher tries to apply as the "Principal Investigator" for two research projects.
【Type "Principal Investigator→Principal Investigator"】(see page 35)

Consequently, he or she cannot make more than one application for one and the same research category (screening division) at the same time **(In case he or she has a continued research project, he or she cannot apply for a new research project in one and the same research category (screening division))**.

(cases that fall under "－" in the table)

In case one researcher tries to make a duplicate application for two research projects, as the Principal Investigator for both, the following restrictions on duplicate applications of the type from A to D below apply.

However, this does not apply in case a researcher extended the research period for a KAKENHI (Multi-year Fund) in the final fiscal year (except in cases where she also obtained maternity leave or childcare leave) and in case of an "Application for a grant for the fiscal year before the final fiscal year of a research project" (See "Special cases in the restrictions on duplicate applications", page 33).

A Cases where a researcher can only apply for one research project.

(cases that fall under "×" in the table)

B Cases where a researcher cannot apply for a new research project, because he or she is implementing a continued research project.

(cases that fall under "▲" in the table)

C Cases where a researcher can apply for both research projects, but, if both are adopted, he or she can only implement the research of one research project, as laid down in the rules.

For "■" in the table, the research categories in the section A are given priority
For "□" , the research categories in the section B are given priority

D Cases where, as a general rule, duplicate applicants are not recognized, but where a researcher can apply for both research projects, only if the conditions added below are met.

If a researcher applies as a Principal Investigator for "Scientific Research", screening division "Overseas Academic Research", as a general rule, he or she cannot apply as a Principal Investigator for "Scientific Research", screening division "General" However, except in cases where it is necessary to conduct individually two research projects which clearly differ in objective, plan or methodology within the same fiscal year.

(cases that fall under "★" in the table)

② Cases where a researcher who applies as the Principal Investigator tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project.
【Type "Principal Investigator→Co-Investigator (*kenkyū-buntansha*)"】(see page 37)

In case one researcher applies as the Principal Investigator for a certain research project and at the same time also tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project, or, in case a researcher who has already become the Principal Investigator of a research project the continuation of which is scheduled in FY2013 (continued research project) also tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project, he or she can normally apply for both projects.

However, for a part of the research categories, mainly Specially Promoted Research, Scientific Research on Innovative Areas (Research in a Proposed Research Project), Challenging Exploratory Research, etc., there are restrictions on duplicate applications of the type from A to C below.

A Cases where a researcher can only apply for one research project.

(cases that fall under "×" in the table)

B Cases where a researcher cannot apply for a new research project, because he or she is implementing a continued research project.

(cases that fall under "▲" in the table)

C Cases where a researcher can apply for both research projects, but, if both are adopted, he or she can only implement the research of one research project, as laid down in the rules.

〔For "■" in the table, the research categories in the section A are given priority〕

③ Cases where a researcher who participates in research as the Co-Investigator (*kenkyū-buntansha*) tries to apply as the Principal Investigator of another research project.
【Type "Co-Investigator (*kenkyū-buntansha*)→Principal Investigator"】(see page 39)

In case one researcher tries to participate as the Co-Investigator (*kenkyū-buntansha*) in a certain research project and at the same time also applies as the Principal Investigator of another research project, or, in case a researcher who has already become the Co-Investigator (*kenkyū-buntansha*) of a research project the continuation of which is scheduled in FY2013 (continued research project) also applies as the Principal Investigator of another research project, he or she can normally apply for both projects.

However, for a part of the research categories, mainly Specially Promoted Research, or other projects, there are the same restrictions on duplicate applications as in point ②).

〔For "□"in the table, the research categories in the section B are given priority〕

④ Cases where a researcher who participates as the Co-Investigator (*kenkyū-buntansha*) of a research project also tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project.
【Type "Co-Investigator (*kenkyū-buntansha*)→Co-Investigator (*kenkyū-buntansha*)"】

In case one researcher tries to participate as the Co-Investigator (*kenkyū-buntansha*) in a certain research project and at the same time also tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project, or, in case a researcher who has already become the Co-Investigator (*kenkyū-buntansha*) of a research project the continuation of which is scheduled in FY2013 (continued research project) also tries to participate as the Co-Investigator (*kenkyū-buntansha*) of another research project, he or she can normally apply for both projects.

However, for Specially Promoted Research, a researcher cannot participate in two research projects as the Co-Investigator (*kenkyū-buntansha*). In addition, in case a researcher has already become the Co-Investigator (*kenkyū-buntansha*) of Specially Promoted Research, he or she cannot participate as the Co-Investigator (*kenkyū-buntansha*) of other Specially Promoted Research either.

(3) Restriction Rules on the Receiving of Grants

Among the Restrictions on Duplication, the handling of cases that fall under the category "A researcher can apply for both research projects. However, in case both are adopted, he or she can only implement the research of one research project" (restrictions on receiving of grants) is as follows.

○ On the handling in case both applications that fall under "■" or "□" are adopted

A In cases of "Principal Investigator" and "Principal Investigator" (cases of Principal Investigator of Specially Promoted Research and Principal Investigator of other research categories, etc.), as a result of the restrictions on duplication, a researcher should abandon (or should decline to accept) the research project he or she does not implement, if he or she can only implement the research category mentioned in section A or section B, as laid down in the rules.

B As a result of the Restrictions on Duplication of Principal Investigators of Specially Promoted Research and Co-Investigators (*kenkyū-buntansha*) of other research categories, a researcher should cease being a "Co-Investigator (*kenkyū-buntansha*)" for research projects other than Specially Promoted Research, if he or she can only implement a research project of Specially Promoted Research (as the Principal Investigator).

Moreover, if he or she ceases being the "Co-Investigator (*kenkyū-buntansha*)", he or she should abandon (or should decline to accept) research projects of which he or she cannot continue the research.

(4) Other Important Points

1) Even if duplicate application, etc. is possible according to the rules on restriction of duplication, the researcher should consider the restrictions in case of "Situations where the applicant cannot carry out his/her responsibility as a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*), due to participation in multiple research projects". Altogether, he or she should consider the content of "Elimination of Unreasonable Reduplication and Excessive Concentration" mentioned on page 11.

2) Even if the application has been accepted in the Electronic Application System, it may happen in some cases that afterwards it is not accepted for reviewing, due to the Restrictions on Duplicate Applications. This may happen, for example, in case a change has taken place in the project members of continued research projects. The researcher should sufficiently verify this before the submission of the application documents.

3) Even when a researcher who is eligible to make applications in multiple research institutions applies at the same time from multiple research institutions separately, the restrictions on duplicated applications apply to that researcher in question (Principal Investigator or Co-Investigator (*kenkyū-bentansha*)).

4) When verifying the "Table of Restrictions on Duplication", the participation form to "Summarizing Group Research Projects" in Scientific Research on Innovative Areas (Research in a Proposed Research Area)" is special (see "Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- FY2013 (MEXT)"). Therefore, applicants should take note of the following points.

   A The "Principal Investigator of Summarizing Group Research Projects in Scientific Research on Innovative Areas (Research in a Proposed Research Area)" should verify the relation with "Principal Investigators or Co-Investigators (*kenkyū-buntansha*) of research projects who try to make a duplicate application" in the relevant section of the "Table of Restrictions on Duplication".

   B The "Co-Investigator (*kenkyū-buntansha*) of Summarizing Group Research Projects in Scientific Research on Innovative Areas (Research in a Proposed Research Area)" should verify the relation with "Participation Form to General Planned Research (Planned Research Other than Summarizing Group Research Projects) (Principal Investigators and Co-Investigators (*kenkyū-buntansha*))" and with "Principal Investigators or Co-Investigators (*kenkyū-buntansha*) of research projects who try to make a duplicate application" in the "Table of Restrictions on Duplication".

5) In case the continued research project which needs to be abandoned according to the restriction on the receiving of grants ① has FY2013 as the final fiscal year, and ② has been selected before FY2011, the Principal Investigator should submit a report on the research achievements (a

working paper) and other matters related to the research project in question between June 20 and June 30, 2014.

(5) Special cases in the restrictions on duplicate applications
(Application for a grant for the fiscal year before the final fiscal year of a research project)

1) When a Principal Investigator of a research project whishes to restructure the research project in the light of developments in the research in question, and the research project (continued research project) belongs to the type "Specially Promoted Research", "Scientific Research" or Grant-in-Aid for Young Scientists, the research period is 4 years or more, and FY2013 is the last fiscal year of the research period, then he or she may apply for an "Application for a grant for the fiscal year before the final fiscal year of a research project".
2) The research categories for which new applications may be made, as "Application for a grant for the fiscal year before the final fiscal year of a research project", are "Specially Promoted Research", and "Scientific Research". However, the only research category for which a new application can be made, based on research projects of the category "Grant-in-Aid for Young Scientists (S/A/B)", is "Scientific Research".
3) The restrictions on duplicate applications do not apply to cases where there is, on the one hand, a new application for a research project of the type "Application for a grant for the fiscal year before the final fiscal year of a research project" and, on the other hand, a continued research project on which the new application is based.

   However, the restrictions on duplicate applications do apply to cases where there are, on the one hand, these projects and, on the other hand, other research projects under the supervision of the same Principal Investigator for which an application has been made (including continued research projects).
4) When the research project for which a new application has been made is selected, the KAKENHI of FY2013 for the continued research project on which the new application is based will, as a general rule, not be paid. Even in case when the grand has been paid, the full amount of the grant should be refunded. For this reason, the proposal for grant-in-aid for a research project for which a new application is made should include a part of the budget necessary for the implementation of the continued research project for FY2013.

   Moreover, in this case, the Principal Investigator should submit a report on the research achievements (a working paper) and other matters related to the continued research project in question between June 20 and June 30, 2014 Therefore, he or she should include the budget for the report, etc. in question, when completing the preparations.

(Handling of Restrictions on Duplicate Applications Brought About by an Extension of the Research Period)

1) For KAKENHI (Multi-year Fund), the restrictions on duplicate applications do not apply to cases where there is, on the one hand, a research project of which the research period has been extended and, on the other hand, a new research project for which the researcher tries to apply, on condition he or she extend the research period in the final fiscal year (except in cases where the researcher obtained maternity leave or childcare leave).

2) However, the restrictions on duplicate applications do apply to cases where there is, on the one hand, a new research project for which the researcher tries to apply and, on the other hand, another research project for which the same Principal Investigator applies (including continued research projects).

Attached Table 1　Table of Restrictions on Duplication

1－1) Type “Principal Investigator (New/Continued) (Section A) ⟶ Principal Investigator (Section B)”

This table shows the restrictions on duplication in case of "a person who tries to apply as Principal Investigator for a research project mentioned in section A (research categories for which JSPS organizes a call for proposals), or a person who has already become Principal Investigator of a research project that is scheduled to be continued in FY2013 (continued research project) mentioned in section A" applies as Principal Investigator for mentioned in section B.

Section A			Section B	Specially Promoted Research	Scientific Research (S)	Scientific Research (A)		Scientific Research (B)		Scientific Research (C)	Grant-in-Aid for Young Scientists(A)	Grant-in-Aid for Young Scientists(B)	Scientific Research on Priority Areas			Challenging Exploratory Research
						General	Overseas Academic Research	General	Overseas Academic Research	General			Summarizing group	Planned research	Publicly invited research	
				New	New	New	New	New	New	New	New	New	New	New	New	New
				PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Specially Promoted Research		**New**	**PI**	－	■	■	■	■	■	■	■	■	×	■	■	■
		Continued	**PI**	－	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Scientific Research (S)		**New**	**PI**	□	－	■	■	×	×	×	×	×	□			
		Continued	**PI**	□	－	▲	▲	▲	▲	▲	▲	▲	▲			
Scientific Research (A)	**General**	**New**	**PI**	□	□	－	★	×	★	×	×	×				
		Continued	**PI**	□	▲	－	★	▲	★	▲	▲	▲				
	Overseas Academic Research	**New**	**PI**	□	□	★	－	★	×	★	×	×				
		Continued	**PI**	□	▲	★	－	★	▲	★	▲	▲				
Scientific Research (B)	**General**	**New**	**PI**	□	×	×	★	－	★	×	×	×				
		Continued	**PI**	□	▲	▲	★	－	★	▲	▲	▲				
	Overseas Academic Research	**New**	**PI**	□	×	★	×	★	－	★	×	×				
		Continued	**PI**	□	▲	★	▲	★	－	★	▲	▲				
Scientific Research (C)	**General**	**New**	**PI**	□	×	×	★	×	★	－	×	×				×
		Continued	**PI**	□	▲	▲	★	▲	★	－	▲	▲				▲
Grant-in-Aid for Young Scientists(S)		**Continued**	**PI**	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		▲
Grant-in-Aid for Young Scientists(A)		**New**	**PI**	□	×	×	×	×	×	×	－	×				
		Continued	**PI**	□	▲	▲	▲	▲	▲	▲	－	▲				
Grant-in-Aid for Young Scientists(B)		**New**	**PI**	□	×	×	×	×	×	×	×	－				×
		Continued	**PI**	□	▲	▲	▲	▲	▲	▲	▲	－				▲
Challenging Exploratory Research		**New**	**PI**	□						×		×				－
		Continued	**PI**	□						▲		▲				－
Grant-in-Aid for Research Activity Start-up		**Continued**	**PI**	□	□	□	□	□	□	□	□	□	□	□	□	□

Blank cell:The researcher can apply for both research projects.

－:A researcher can only apply for one research project in one and the same research category (screening division) (In case he or she has a continued research project mentioned in section A, he or she cannot apply for a research project mentioned in section B)

×:The researcher can only apply for one research project (in case he or she applied for a research project mentioned in section A, he or she cannot apply for a research project mentioned in section B).

▲:The researcher cannot apply for a research project mentioned in section B (He or she only implements the research of a continued research project mentioned in section A).

■:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in A.

□:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in B.

★:As a rule duplicate applications are not accepted. (This does not apply to cases where it is necessary to conduct two clearly different research projects within the same fiscal year.)

1－2) Type “Principal Investigator (New/Continued) (Section A) ⟶ Principal Investigator (Section B)”

This table shows the restrictions on duplication in case of "a person who tries to apply as Principal Investigator for a research project mentioned in section A (research categories for which MEXT organizes a call for proposals), or a person who has already become Principal Investigator of a research project that is scheduled to be continued in FY2013 (continued research project) mentioned in section A" applies as Principal Investigator for mentioned in section B.

Section A				Section B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A)		Scientific Research (B)		Scientific Research (C)	Grant-in-Aid for Young Scientists(A)	Grant-in-Aid for Young Scientists(B)	Challenging Exploratory Research
						General	Overseas Academic Research	General	Overseas Academic Research	General			
				New	New	New	New	New	New	New	New	New	New
				PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Scientific Research on Innovative Areas (Research in a proposed research area)	Summarizing group	New	PI	×	■								
		Continued	PI	▲	▲								
	Planned research	New	PI	□									
		Continued	PI	□									
	Publicly invited research	New	PI	□									
		Continued	PI	□									

Blank cell:The researcher can apply for both research projects.

×:The researcher can only apply for one research project (in case he or she applied for a research project mentioned in section A, he or she cannot apply for a research project mentioned in section B).

▲:The researcher cannot apply for a research project mentioned in section B (He or she only implements the research of a continued research project mentioned in section A).

■:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in A.

□:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in B.

2－1) Type “Principal Investigator (New/Continued) (Section A) ⟶ Co-Investigator (kenkyū-buntansha) (Section B)”

This table shows the restrictions on duplication in case of "a person who tries to apply as Principal Investigator for a research project mentioned in section A (research categories for which JSPS organizes a call for proposals), or a person who has already become Principal Investigator of a research project that is scheduled to be continued in FY2013 (continued research project) mentioned in section A" participates in a research project mentioned in section B as Co-Investigator (kenkyū-buntansha).

Section A \ Section B				Specially Promoted Research	Scientific Research (S)	Scientific Research (A)		Scientific Research (B)		Scientific Research (C)	Scientific Research on Priority Areas proposed research area	Challenging Exploratory Research
						General	Overseas Academic Research	General	Overseas Academic Research	General	Research in a proposed research area / Planned research	
				New	New	New	New	New	New	New	New	New
				Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)
Specially Promoted Research		**New**	**PI**	×	■	■	■	■	■	■	■	■
		Continued	**PI**	▲	▲	▲	▲	▲	▲	▲	▲	▲
Scientific Research (S)		**New**	**PI**									
		Continued	**PI**									
Scientific Research (A)	**General**	**New**	**PI**									
		Continued	**PI**									
	Overseas Academic Research	**New**	**PI**									
		Continued	**PI**									
Scientific Research (B)	**General**	**New**	**PI**									
		Continued	**PI**									
	Overseas Academic Research	**New**	**PI**									
		Continued	**PI**									
Scientific Research (C)	**General**	**New**	**PI**									
		Continued	**PI**									
Grant-in-Aid for Young Scientists(S)		**Continued**	**PI**									
Grant-in-Aid for Young Scientists(A)		**New**	**PI**									
		Continued	**PI**									
Grant-in-Aid for Young Scientists(B)		**New**	**PI**									
		Continued	**PI**									
Challenging Exploratory Research		**New**	**PI**									
		Continued	**PI**									
Grant-in-Aid for Research Activity Start-up		**Continued**	**PI**									

Blank cell:The researcher can apply for both research projects.

×: The researcher can only apply for one research project (in case he or she applied for a research project mentioned in section A, he or she cannot apply for a research project mentioned in section B).

▲:The researcher cannot apply for a research project mentioned in section B (He or she only implements the research of a continued research project mentioned in section A).

■:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in A.

2－2) Type “Principal Investigator (New/Continued) (Section A) ⟶ Co-Investigator (kenkyū-buntansha)(Section B)”

This table shows the restrictions on duplication in case of "a person who tries to apply as Principal Investigator for a research project mentioned in section A (research categories for which MEXT organizes a call for proposals), or a person who has already become Principal Investigator of a research project that is scheduled to be continued in FY2013 (continued research project) mentioned in section A" participates in a research project mentioned in section B as Co-Investigator (kenkyū-buntansha).

Section A				Section B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (A) Overseas Academic Research	Scientific Research (B) General	Scientific Research (B) Overseas Academic Research	Scientific Research (C) General	Challenging Exploratory Research
				New	New	New	New	New	New	New	New
				Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)	Co-I (kenkyu-buntansha)
Scientific Research on Innovative Areas (Research in a proposed research area)	Summarizing group	New	PI	×							
		Continued	PI	▲							
	Planned research	New	PI								
		Continued	PI								
	Publicly invited research	New	PI								
		Continued	PI								

Blank cell:The researcher can apply for both research projects.

×:The researcher can only apply for one research project (in case he or she applied for a research project mentioned in section A, he or she cannot apply for a research project mentioned in section B).

▲:The researcher cannot apply for a research project mentioned in section B (He or she only implements the research of a continued research project mentioned in section A).

3－1) Type “Co-Investigator (kenkyū-buntansha) (New/Continued) (Section A) ⟶ Principal Investigator (Section B)”

This table shows the restrictions on duplication in case of "a person who tries to participate as Co-Investigator (kenkyū-buntansha) in a research project mentioned in section A (research categories for which JSPS organizes a call for proposals), or a person who has already become Co-Investigator (kenkyū-buntansha) of a research project that is scheduled to be continued in FY2013(continued research project) mentioned in section A" applies as Principal Investigator for mentioned in section B.

Section A \ Section B			Specially Promoted Research	Scientific Research (S)	Scientific Research (A)		Scientific Research (B)		Scientific Research (C)	Grant-in-Aid for Young Scientists(A)	Grant-in-Aid for Young Scientists(B)	Scientific Research on Priority Areas			Challenging Exploratory Research
					General	Overseas Academic Research	General	Overseas Academic Research	General			Summarizing Group	Planned research	Publicly invited research	
			New	New	New	New	New	New	New	New	New	New	New	New	New
			PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Specially Promoted Research		**New**	**Co-I (kenkyu-buntansha)**	×								×			
		Continued	**Co-I (kenkyu-buntansha)**	▲								▲			
Scientific Research (S)		**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
Scientific Research (A)	**General**	**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
	Overseas Academic Research	**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
Scientific Research (B)	**General**	**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
	Overseas Academic Research	**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
Scientific Research (C)	**General**	**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											
Challenging Exploratory Research		**New**	**Co-I (kenkyu-buntansha)**	□											
		Continued	**Co-I (kenkyu-buntansha)**	□											

Blank cell:The researcher can apply for both research projects.

×: The researcher can only apply for one research project (in case he or she applied for a research project mentioned in section A, he or she cannot apply for a research project mentioned in section B).

▲:The researcher cannot apply for a research project mentioned in section B (He or she only implements the research of a continued research project mentioned in section A).

□:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in B.

3－2) Type “Co-Investigator (kenkyū-buntansha) (New/Continued) (Section A） ⟶ Principal Investigator (Section B)”

This table shows the restrictions on duplication in case of "a person who tries to participate as Co-Investigator (kenkyū-buntansha) in a research project mentioned in section A (research categories for which MEXT organizes a call for proposals), or a person who has already become Co-Investigator (kenkyū-buntansha) of a research project that is scheduled to be continued in FY2013 (continued research project) mentioned in section A" applies as Principal Investigator for mentioned in section B.

Section A				Section B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (A) Overseas Academic Research	Scientific Research (B) General	Scientific Research (B) Overseas Academic Research	Scientific Research (C) General	Grant-in-Aid for Young Scientists(A)	Grant-in-Aid for Young Scientists(B)	Challenging Exploratory Research
				New	New	New	New	New	New	New	New	New	New
				PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Scientific Research on Innovative Areas (Research in a proposed research area)	Planned research	New	Co-I (kenkyu-buntansha)	□									
		Continued	Co-I (kenkyu-buntansha)	□									

Blank cell:The researcher can apply for both research projects.

□:The researcher can apply for both research projects. However, in case both are adopted, he or she only implements the research of the research project in B.

3. Preparing the Application (Proposal for Grant-in-Aid) and Submitting the Application (Proposal for Grant-in-Aid)

The document necessary for the application is the Proposal for Grant-in-Aid.
The Principal Investigator should prepare the Proposal for Grant-in-Aid (PDF file) by entering the application information (Items to be filled in on the form on the website), and by attaching the separately prepared Files with Project Description (Items to be entered in the attached file) to the Electronic Application System. Then he or she should submit (send) the Proposal for Grant-in-Aid to the research institution he or she belongs to, by the deadline set by the research institution.

Details on the preparation of the Proposal for Grant-in-Aid and the way how to apply are as follows. The applicant should verify this information.

(1) Application via the Electronic Application System

When applying, **the applicant should login into the "e-Rad" using the e-Rad ID and Password that is provided by the research institution to which he or she belongs. Then he or she should access the "Electronic Application System" and prepare the application documents.**

1) Researchers who apply as Principal Investigators, based on the "FY2013 Grants-in-Aid for Scientific Research – KAKENHI, Procedures for Preparing and Entering a Proposal for Grant-in-Aid for Specially Promoted Research (New/Continued)", in the case of "Specially Promoted Research", and based on the "Procedures for Preparing and Entering Application Information (Items to be filled in on the form on the website) (Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B))", in the case of the other research categories. Finally they should attach the project description file (Items to be entered in the attached file), that has been separately

   Note The project description file (items to be entered in the attached file) can also be downloaded from the JSPS website on Grants-in-Aid for Scientific Research – KAKENHI (http://www.jsps.go.jp/j-grantsinaid/index.html) before obtaining an ID and a password.

2) The research institution to which the Principal Investigator belongs should compile and submit the necessary proposal for grant-in-aid.

   Therefore, the Principal Investigator should **submit (send) the application documents to the research institution he/she belongs to, by the deadline decided the research institution.** (He or she cannot submit (send) them directly to JSPS.)

Moreover, when submitting (sending) it, he or she should sufficiently check the details of the Proposal for Grant-in-Aid (PDF file) he or she prepared, and perform the "check completed and submission" process.

(He or she should submit the proposal for grant-in-aid (PDF file) to the research institution to which he or she belongs.)

(2) Preparing the proposal for Grant-in-Aid

The Principal Investigator should prepare a proposal for grant-in-aid, **for "Specially Promoted Research", in accordance with the "FY2013 Grants-in-Aid for Scientific Research, Procedures for Preparing and Entering a Proposal for Grants-in-Aid for Specially Promoted Research (New and Continued)"** and, **for the research categories other than "Specially Promoted Research", in accordance with the "Procedures for Preparing and Entering Application Information (to be entered in the website) (Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B))" and "FY2013 Grants-in-Aid for Scientific Research, Procedures for Preparing and Entering a Proposal for Grant-in-Aid"** for each research category (screening panel).

On the Proposal for Grant-in-Aid

1) A proposal for grant-in-aid consists of the following two parts:

First part: Enter **the application information (to be entered in the website)** (*1) in the electronic application system.

(*1) Information to be entered by the Principal Investigator in the website via the electronic application system includes the title of proposed project, basic data on the proposed project, like the budget for which the application is made, basic data on the project members, etc.

Second part: Download **the project description file** (*2) from the section "Grants-in-Aid for Scientific Research - KAKENHI" of the JSPS website (http://www.jsps.go.jp/j-grantsinaid/index.html), and prepare the proposal for grant-in-aid (PDF file) by attaching it to the "electronic application system".

(Paper-based applications will not be accepted.)

(*2) Details on the research project including the purpose of the research, the research plan and research methods should be entered.

<table>
<tr><td rowspan="3">Research category</td><td colspan="2">Proposal for grant-in-aid</td></tr>
<tr><td>First part</td><td>Second part</td></tr>
<tr><td>Application information (to be entered in the website)</td><td>Project description file</td></tr>
<tr><td>Specially Promoted Research (New) (English Version)</td><td rowspan="14">To be entered in the electronic application system</td><td>S-1-1 (1)</td></tr>
<tr><td>Specially Promoted Research (New) (Japanese Version)</td><td>S-1-1 (2)</td></tr>
<tr><td>Specially Promoted Research (Continued)</td><td>S-1-2</td></tr>
<tr><td>Scientific Research (S)</td><td>S-1-6</td></tr>
<tr><td>Scientific Research (A)</td><td>S-1-7</td></tr>
<tr><td>Research related to the screening panel for Overseas Academic Research</td><td>S-1-9</td></tr>
<tr><td>Scientific Research (B)</td><td>S-1-7</td></tr>
<tr><td>Research related to the screening panel for Overseas Academic Research</td><td>S-1-9</td></tr>
<tr><td>Scientific Research (C)</td><td>S-1-8</td></tr>
<tr><td>Challenging Exploratory Research</td><td>S-1-10</td></tr>
<tr><td>Grant-in-Aid for Young Scientists (A)</td><td>S-1-12</td></tr>
<tr><td>Grant-in-Aid for Young Scientists (B)</td><td>S-1-13</td></tr>
<tr><td>Continued Research Project (in the case of a major change in the research project)</td><td>S-1-14</td></tr>
</table>

2) A copy of the proposal for grant-in-aid in black-and-white (gray scale) print is sent to the screening committee. Therefore, when preparing the proposal for grant-in-aid, the applicant should pay attention not to make a version of which the content becomes unclear when copied.

3) The personal information included in the proposal for grant-in-aid will be used to eliminate unreasonable reduplication and excessive concentration of competitive funds and to carry out

service on KAKENHI. (This also includes offering personal information to external private enterprises in charge of electronic processing and management of the data.) The personal information included in the application forms will also be provided to the e-Rad. (It may happen that information will be supplied to the Government Research and Development Database of the Cabinet Office through e-Rad. Moreover, the applicant may be requested to cooperate in various kinds of work, the verification of information and other matters, in order to prepare this information.)

※ "Government Research and Development Database": In order to appropriately assess research and development conducted using national funding, and in order to effectively and efficiently draft policy plans related to comprehensive strategy, resource allotment and other matters, the Council for Science and Technology Policy of the Cabinet Office has created a database that makes it possible to comprehend various kinds of information in an integrated and exhaustive manner, and to search and analyze necessary information.

Moreover, information concerning adopted research projects (title of proposed project, name of the Principal Investigator, amount planned to be provided, etc.) is considered to be "information planned to be made public", as laid down in Article 5, paragraph 1, item 1 of the "Act on Access to Information Held by Independent Administrative Agencies" (Act No. 140 of 2001). This information will be disclosed through press release materials, the database of the National Institute of Informatics, and other means.

Information like professional affiliation, name, etc. of the Principal Investigator of the selected research project will be entered in the database of JSPS screening committee candidates, as the need arises. A request for updating the database will be made annually through the research institution to which the Principal Investigators belong (planned for April).

Issues that Need to Be Considered When Preparing the Proposal for Grant-in-Aid

When preparing the Proposal for KAKENHI, the applicant should check the following points and verify whether there no flaws in the content.

1. Whether or not it is an Ineligible Research Project

The following research projects are not eligible:

A) Research projects which merely aim at purchasing ready-made research equipment.

B) Research projects which aim at producing large-size research equipment and similar things which should be funded by other budgets.

C) Research projects which directly aim at developing and selling goods and services (including

market trend surveys on the development and sale of goods and services).

D) Funded research which is carried out as commercial business.

E) Research projects with a budget of **less than 100,000 yen** in any of the fiscal years of the research period.

2. Whether the following requirements are met for the Project Members

When necessary, the Principal Investigator (See page 47 1)) can set up a team of project members together with a Co-Investigator (*kenkyū-buntansha*) (See page 48 2)), a Co-Investigator (*renkei-kenkyūsha*) (See page 48 3)), and/or a Research Collaborator (See page 48 4), according to the nature of the research project.

Moreover, **regarding the Co-Investigator (*kenkyū-buntansha*) and the Co-Investigator (*renkei-kenkyūsha*), like in the case of the Principal Investigator, the research institution ([Note]) needs to verify whether, at the time of the application, the following requirements are met.**

However, Research Collaborators do not necessarily need to be registered in e-Rad.

Moreover, JSPS Fellows, Foreign JSPS Fellows and students, such as, for example, graduate students cannot become Principal Investigators. They can neither become Co-Investigators (*kenkyū-buntansha*) and Co-Investigators (*renkei-kenkyūsha*).

Requirements

1) **The researcher should belong to the research institution as a person who has *inter alia* the duty to perform research activities within the research institution in question** (irrespective of whether the work is paid or unpaid, full-time of part-time. Moreover, it is not necessary for the researcher to perform these research activities as such as his or her main duty.)
2) **The researcher should actually be engaged in research activities at the research institution in question** (This does not apply to cases where he or she is only engaged as a research assistant.)
3) **The researcher is not a graduate student or any other category of student.** (However, this does not apply to persons who have a position consisting of conducting research activities in the research institution to which they belong, as their main work (e.g., university teaching staff, researchers from companies, etc.), and who also have a student status.)

Note: Research institutions as prescribed in Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research (announced by the Ministry of Education)

(References) Requirements that need to be met by the research institution(see page 100)
Requirements

- If a KAKENHI is given, the research activity should be conducted as an activity of the research institution in question.
- If a KAKENHI is given, the research institution should carry out the management of the KAKENHI.

Research grant employees, as a rule, need to concentrate on their employment related work according to their employment contracts. Therefore, considering the working hours they need to allot to the employment related work, they cannot apply for Grants-in-Aid for Scientific Research themselves.

However, if they provide a clear explanation on the time they can spend besides their employment related work, and if during this time they themselves attempt to conduct research using a Grant-in-Aid for Scientific Research, on their own initiative, it is possible for them to apply for Grants-in-Aid for Scientific Research, on condition that the following points have been verified in the research institution. In this case, they can apply as Principal Investigator, and they can also become Co-Investigator (*kenkyū-buntansha*), Co-Investigator (*renkei-kenkyūsha*), or other project members.

- It has been determined in the employment contract that research grant employees themselves can conduct research on their own initiative, besides the employment related work.
- The employment related work and work devoted to research that they conduct themselves on their own initiative has clearly been divided in the working hours and the effort.
- Time that can be allotted to research which they attempt to conduct themselves on their own initiative has sufficiently been secured, besides the time spent for employment related work.

Principal Investigators and Co-Investigators (*kenkyū-buntansha*) are members of funded projects, as stipulated in the Law on the Improvement of the Administration of the Budget for Grants-in-Aid (1955, Law no. 179), and it has been decided that, in case they commit inappropriate use of the grants-in-aid or the like, no KAKENHI will be offered, for a fixed period of time.

In addition, it may happen that researchers are treated as indicated below, even if their researcher information has been registered in e-Rad as "Eligible to Apply for Grants-in-Aid for Research".

- If it is judged in the research institution to which researchers belong that it is not appropriate to let them conduct their research activities as activities of the research institution in question, it may happen that the research institution does not recognize the application, and it may happen that the application for funding by these researchers in question is not recognized and that the application for funding of the KAKENHI is

rejected.

- No KAKENHI will be funded, if there is a new application for Grants-in-Aid for Scientific Research from researchers who do not submit the report on the research achievements at the end of the research, without any reason, even if their research has been adopted after screening. Moreover, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other Grants-in-Aid for Scientific Research due to be implemented in the same fiscal year will be suspended.

1) Principal Investigator (The applicant)

(A) The Principal Investigator is a member of a funded project and is the researcher who assumes full responsibility for the implementation of the research project (including the summarizing of the research achievements).
Moreover, persons who are expected to become unable to carry out their responsibility as a Principal Investigator, for example due to the loss of their applicant eligibility during the period of research, should avoid becoming a Principal Investigator. (See note.)

(B) When setting up a team of project members, the Principal Investigator should without fail collect a "Written Consent of the Co-Investigator (*kenkyū-buntansha*) (for other institution)", in case the Co-Investigator (*kenkyū-buntansha*) in question belongs to a different research institution, or a "Written Consent of the Co-Investigator (*kenkyū-buntansha*) (for same institution)", in case the Co-Investigator (*kenkyū-buntansha*) belongs to the same institution, and retain it.

(Note) The Principal Investigator is the researcher who assumes full responsibility for the implementation of the research plan, and thus plays a central role. Persons who, at the time they apply, are expected to lose their eligibility to apply during the research period, due to retirement or other reasons, and thus become unable to carry out their responsibility, are requested to avoid becoming a Principal Investigator.

For this reason, replacements of Principal Investigators will not be accepted anymore.
However, for "Summarizing Group Research Projects" of "Scientific Research on Innovative Areas (Research in a proposed research area)", it may happen that, after completion of the necessary procedures, replacements of Principal Investigators (or Principal Investigator of Innovative Areas) are accepted.

(C) Apart from registration in e-Rad of the information on the researchers as "Eligible to Apply for KAKENHI", it is essential that Principal Investigators are not designated as ineligible for receipt of funding in FY2013, because they committed fraudulent use, fraudulent receipt of grants or

fraudulent acts using KAKENHI or other competitive funding.

2) Co-Investigator (*kenkyū-buntansha*)

(A) The Co-Investigator (*kenkyū-buntansha*) is a member of the funded project, and engages in research activity, collaborating with the Principal Investigator in the implementation of the research project and sharing the responsibility for the implementation of the research as a funded project. He or she has to receive a share of the grant-in-aid. (Even when the Co-Investigator (*kenkyū-buntansha*) belongs to the same research institution as the Principal Investigator, he or she should be allotted a share of the expenses.)

Moreover, a person who is expected to become unable to carry out one's responsibility as a Co-Investigator (*kenkyū-buntansha*), for example due to the loss of one's applicant eligibility during the period of research, should avoid becoming a Co-Investigator (*kenkyū-buntansha*).

(B) Apart from registration in e-Rad of the information on the researchers as "Eligible to Apply for KAKENHI", it is essential, in the same manner as for Principal Investigators, that Co-Investigators (*kenkyū-buntansha*) are not designated as ineligible for receipt of funding in FY2013, because they committed fraudulent use, fraudulent receipt of grants or fraudulent acts using KAKENHI or other competitive funding.

3) Co-Investigator (*renkei-kenkyūsha*)

(A) The Co-Investigator (*renkei-kenkyūsha*) is a researcher who participates in the research project as a project member, under the responsibility of the Principal Investigator and the Co-Investigator(s) (*kenkyū-buntansha*).

Since the Co-Investigator (*renkei-kenkyūsha*) is not a member of the funded project, he or she cannot receive a share of the KAKENHI, and cannot use subsidies on his/her own initiative.

(B) It is essential that Co-Investigators (*renkei-kenkyūsha*) register the information on the researchers in e-Rad as "Eligible to Apply for KAKENHI", in the same manner as for Principal Investigators and Co-Investigators (*kenkyū-buntansha*).

4) Research Collaborator

(A) A Research Collaborator is somebody who cooperates in the implementation of a research project other than the Principal Investigator, the Co-Investigator (*kenkyū-buntansha*) and the

Co-Investigator (*renkei-kenkyūsha*).

(For example, a postdoctoral researcher, a research assistant (RA), a Fellow of the Japan Society for the Promotion of Science (JSPS Fellow), a researcher who belongs to an overseas research institution, a researcher who works for a corporation that is not recognized according to Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research, etc.)

(B) It is not necessary for Research Collaborators to register the information on the researchers in e-Rad as "Eligible to Apply for KAKENHI".

3. Whether the following requirements are met for the Budget

1) Eligible costs (direct costs)

The budget necessary for the implementation of the research plan (including the budget necessary for summarizing the research achievements) is eligible.

* In case of research projects where in any of the fiscal years any of the costs like "equipment", "travel expenses" or "personnel expenditure and remuneration" exceeds 90%, the applicant should write down in the proposal for grant-in-aid the reasons why these costs in question are necessary for the implantation of the research.

2) Ineligible costs

The following costs are not included in the funding:

A Costs for buildings and other facilities (excluding the costs for minor installations which became necessary because of the introduction of goods that have been purchased by means of direct costs)

B Costs for handling accidents or disasters that occurred during the implementation of funded project

C Personnel expenditure and remuneration for the Principal Investigator or Co-Investigator(s) (*kenkyū-buntansha*)

D Other costs which fall under indirect costs*

* Indirect costs are costs necessary for the management of the research institution and other things that arise during the implementation of the research project (corresponding with 30% of the amount of the direct costs). The costs are used by the research institution.

This time, it is scheduled to set up indirect costs for the research categories for which a call for proposals is organized. However, the Principal Investigator does not need to state those indirect costs in the application documents.

4. When applying, the applicant should select a desired area for screening as follows

1) In the case of an application for "Specially Promoted Research"

When applying, please make sure to select, according to the content of the research project, one desired area for screening from "Humanities and Social Sciences", "Science and Engineering" or "Biological Sciences". Moreover, if you select "Science and Engineering", please select one screening division from the subcategories "Mathematics/Physics", "Chemistry", or "Engineering", which you think is the most closely related to your research project.

2) In case of an application for "Scientific Research" (screening division "General"), "Challenging Exploratory Research" and "Grant-in-Aid for Young Scientists (A)"

When applying, please make sure to **select**, according to the content of the research project, **one appropriate research field** from **Attached Table 2 "List of Categories, Areas, Disciplines and Research Fields for FY2013 Grants-in-Aid for Scientific Research"** (hereinafter called "List of Research Fields" ; see pages 52-54), which is a classification table showing the desired areas for screening. In addition, please make sure to select one keyword which the applicant thinks is the most closely related to the content of his/her research project within the selected research field from **Attached Table 3 "Appendix Table of Keywords"** (hereinafter called "Table of Keywords"; see pages 60-96).

About the "List of Disciplines and Research Fields with a Time Limit" (special cases in "Scientific Research (C)")

In order to be able to react flexibly to trends in scientific research, a **"List of Disciplines and Research Fields with a Time Limit"** (see pages 55-59), has been set up, as a table separate from the "List of Research Fields". This list is operated in a flexible way, within the limits of a set period. Only for research projects that fall into the category of "Scientific Research (C)", one area can be selected as a desired area for screening from this "List of Disciplines and Research Fields with a Time Limit". Moreover, the research period is 3 to 5 years, regardless of the set period of the research area.

3) In case of an application for "Grant-in-Aid for Young Scientists (B)"

When applying, please make sure to **select**, according to the content of the research project, **one or (if you desire screening in multiple areas for new and merged research plans) two appropriate research fields** from the "List of Research Fields", which is a classification table showing the desired areas for screening. In addition, please make sure to select from the "Table of Keywords" **one** keyword which you think is the most closely related to the content of your research project within the selected research field, **if you selected one research field**, OR **one keyword for each research field, one by one (i.e. two in total)**, **if you selected two research fields**.

○ Outline of the screening of research plans for which two research fields have been selected (plan)

- In the same manner as for research plans for which one research field has been selected, two-stage screening will be carried out.
- During the first stage of the screening, the first-stage screening committee members (judges) for "Grant-in-Aid for Young Scientists (B)" will carry out a document-based screening for each of the two selected research fields.
- During the second stage of the screening, a collegial screening will be carried out, based on the screening results of the first stage, by screening committee members (judges) who are different from the first-stage screening committee members. This collegial screening will take place in committees that are different from the committees that screen the research plans for which one research field has been selected. More specifically, these committees are, first, a committee for each of the four categories (i.e. Comprehensive Fields, Humanities and Social Sciences, Science and Engineering, Biological Sciences) that only screens research plans for which two newly established research fields have been selected and, secondly, a committee that carries out overall adjustments.

※ For more details concerning the screening, please refer to "Rules on Screening and Assessment of Grants-in-Aid for Scientific Research", which will be made public in early October.

4) In case of an application for "Scientific Research" (screening division "Overseas Academic Research")

When applying, please **make sure to select one area** you wish to have screened from the following 17 areas, and one research field which you think is the most closely related to your research project.

	Desired area for screening
Humanities and Social Sciences	1) Humanities A (philosophy, literature, linguistics, the arts) 2) Humanities B (history, archaeology) 3) Humanities C (human geography, cultural anthropology) 4) Humanities D (Geography, Area studies, and others which do not fall under Humanities A, B, or C)
	5) Social Sciences A (law, Politics) 6) Social Sciences B (economics, business administration) 7) Social Sciences C (sociology) 8) Social Sciences D (psychology, education)
Science and Engineering	9) Mathematical and physical sciences A (earth and planetary science) 10) Mathematical and physical sciences B (mathematics, physics, and others which do not fall under Mathematical and physical sciences A)
	11) Chemistry
	12) Engineering
Biological Sciences	13) Biology
	14) Agricultural sciences A (plant production and environmental agriculture, agricultural chemistry, forest and forest products science, boundary agriculture) 15) Agricultural sciences B (agricultural science in society and economy, agro-engineering, animal life science, applied aquatic science)
	16) Medicine, dentistry, and pharmacy A (pharmacy, basic medicine, boundary medicine, and society medicine) 17) Medicine, dentistry, and pharmacy B (clinical medicine, dentistry, nursing, and others which do not fall under Medicine, dentistry, and pharmacy A)

Attached Table 2　List of Categories, Areas, Disciplines and Research Fields

(1) Grants-in-Aid for Scientific Research FY2013 List of Categories, Areas, Disciplines and Research Fields

Category: Integrated Disciplines

Area	Discipline	Research Field	Item Number	Remark
Informatics	Principles of Informatics	Theory of informatics	1001	
		Mathematical informatics	1002	
		Statistical science	1003	
	Principles of Informatics	Computer system	1101	
		Software	1102	
		Information network	1103	
		Multimedia database	1104	
		High performance computing	1105	
		Information security	1106	
	Human informatics	Cognitive science	1201	
		Perceptual information processing	1202	
		Human interface and interaction	1203	
		Intelligent informatics	1204	
		Soft computing	1205	
		Intelligent robotics	1206	
		Kansei informatics	1207	
	Frontiers of informatics	Life / Health / Medical informatics	1301	
		Web informatics, Service informatics	1302	A
				B
		Library and information science/ Humanistic social informatics	1303	A
				B
		Learning support system	1304	
		Entertainment and game informatics	1305	
Environmental science	Environmental analyses and evaluation	Environmental dynamic analysis	1401	
		Risk sciences of radiation and chemicals	1402	A
				B
		Environmental impact assessment	1403	
	Environmental conservation	Environmental engineering and reduction of environmental burden	1501	
		Modeling and technologies for environmental conservation and remediation	1502	
		Environmental conscious materials and recycle	1503	
		Environmental risk control and evaluation	1504	
	Sustainable and environmental system development	Environmental and ecological symbiosis	1601	
		Design and evaluation of sustainable and environmental conscious system	1602	
		Environmental policy and social systems	1603	
Complex systems	Design science	Design science	1651	
	Human life science	Home economics/Human life	1701	
		Clothing life/Dwelling life	1702	
		Eating habits	1703	A
				B
	Science education/ Educational technology	Science education	1801	※
		Educational technology	1802	※
	Sociology/History of science and technology	Sociology/History of science and technology	1901	
	Cultural assets study and museology	Cultural assets study and museology	2001	A
				B
	Geography	Geography	2101	
	Social/Safety system science	Social systems engineering/ Safety system	2201	A
				B
		Natural disaster / Disaster prevention science	2202	A
				B
	Biomedical engineering	Biomedical engineering/ Biomaterial science and engineering	2301	A
				B
		Medical systems	2302	
		Medical engineering assessment	2303	
		Rehabilitation science/ Welfare engineering	2304	A
				B
Complex systems	Health/Sports science	Developmental mechanisms and the body works	2401	A
				B
		Sports science	2402	A
				B
		Applied health science	2403	A
				B
	Childhood science	Childhood science (childhood environment science)	2451	
	Biomolecular science	Biomolecular chemistry	2501	
		Chemical biology	2502	
	Brain sciences	Basic / Social brain science	2601	A
				B
		Brain biometrics	2602	

Category: Humanities and Social Sciences

Humanities/ Social sciences	Area studies	Area studies	2701	
	Gender	Gender	2801	
Humanities	Philosophy	Philosophy/Ethics	2901	
		Chinese philosophy/Indian philosophy/Buddhist studies	2902	※
		Religious studies	2903	
		History of thought	2904	
	Art studies	Aesthetics and studies on art	3001	
		Fine art history	3002	
		Art at large	3003	
	Literature	Japanese literature	3101	
		Literature in English	3102	
		European literature	3103	
		Chinese literature	3104	
		Literature in general	3105	
	Linguistics	Linguistics	3201	※
		Japanese linguistics	3202	
		English linguistics	3203	
		Japanese language education	3204	
		Foreign language education	3205	※
	History	Historical studies in general	3301	
		Japanese history	3302	
		History of Asia and Africa	3303	
		History of Europe and America	3304	
		Archaeology	3305	
	Human geography	Human geography	3401	
	Cultural anthropology	Cultural anthropology	3501	
Social sciences	law	Fundamental law	3601	
		Public law	3602	
		International law	3603	
		Social law	3604	
		Criminal law	3605	
		Civil law	3606	
		New fields of law	3607	
	Politics	Politics	3701	
		International relations	3702	
	Economics	Economic theory	3801	
		Economic doctrine/ Economic thought	3802	
		Economic statistics	3803	
		Economic policy	3804	
		Public finance/Public economy	3805	
		Money/ Finance	3806	
		Economic history	3807	
	Management	Management	3901	※
		Commerce	3902	
		Accounting	3903	
	Sociology	Sociology	4001	※
		Social welfare and social work studies	4002	

The first stage of the screening of the research fields that have the indication “A” or “B” in the remarks column is carried out in separate groups. The basis for this division in separate groups is the keywords that need to be selected within each research category. Make sure to select A or B based on the Attached Table “List of Categories, Areas, Disciplines and Research Fields”, when applying for these research fields.

The first stage of the screening of the research fields that have the symbol “※” is carried out in separate groups. The basis for this division in separate groups is the keywords that need to be selected within “Scientific Research (C)”. Make sure to select a division number from 1 to 5 based on the Attached Table “List of Categories, Areas, Disciplines and Research Fields”, when applying for these research fields.

In the case of “Scientific Research (C)”, 15 research fields carried in the “List of Disciplines and Research Fields with a Time Limit” have been set up as areas for screening, besides the main table.

(Humanities and Social Sciences)

Area	Discipline	Research Field	Item Number	Remark
Social sciences	Psychology	Social psychology	4101	
		Educational psychology	4102	
		Clinicapsychology	4103	
		Experimental psychology	4104	
	Education	Education	4201	※
		Sociology of education	4202	
		Education on school subjects and activities	4203	※
		Special needs education	4204	

Category: Science and Engineering

Area	Discipline	Research Field	Item Number	Remark
Interdisciplinary science and engineering	Nano/Micro science	Nanostructural chemistry	4301	
		Nanostructural physics	4302	
		Nanomaterials chemistry	4303	
		Nanomaterials engineering	4304	
		Nanobioscience	4305	
		Nano/Microsystems	4306	
	Applied physics	Applied materials	4401	
		Crystal engineering	4402	
		Thin film/Surface and interfacial physical properties	4403	
		Optical engineering, Photon science	4404	
		Plasma electronics	4405	
		General applied physics	4406	
	Quantum beam science	Quantum beam science	4501	
	Computational science	Computational science	4601	
Mathematical and physical sciences	Mathematics	Algebra	4701	※
		Geometry	4702	※
		Basic analysis	4703	※
		Mathematical analysis	4704	
		Foundations of mathematics/Applied mathematics	4705	
	Astronomy	Astronomy	4801	
	Physics	Particle/Nuclear/Cosmic ray/Astro physics	4901	※
		Condensed matter physics I	4902	
		Condensed matter physics II	4903	※
		Mathematical physics/ Fundamental condensed matter physics	4904	
		Atomic/Molecular/Quantum electronics	4905	
		Biological physics/Chemical physics/Soft matter physics	4906	
	Earth and planetary science	Solid earth and planetary physics	5001	
		Meteorology/Physical oceanography/Hydrology	5002	
		Space and upper atmospheric physics	5003	
		Geology	5004	
		Stratigraphy/Paleontology	5005	
		Petrology/Mineralogy/ Economic geology	5006	
		Geochemistry/Cosmochemistry	5007	
	Plasma science	Plasma science	5101	
Chemistry	Basic chemistry	Physical chemistry	5201	
		Organic chemistry	5202	
		Inorganic chemistry	5203	
	Applied chemistry	Functional solid state chemistry	5301	
		Synthetic chemistry	5302	
		Polymer chemistry	5303	
		Analytical chemistry	5304	
		Bio-related chemistry	5305	
		Green/Environmental chemistry	5306	
		Energy-related chemistry	5307	
	Materials chemistry	Organic and hybrid materials	5401	
		Polymer/Textile materials	5402	
		Inorganic industrial materials	5403	
		Device related chemistry	5404	
Engineering	Mechanical engineering	Materials/ Mechanics of materials	5501	
		Production engineering/ Processing studies	5502	
Engineering	Mechanical engineering	Design engineering/ Machine functional elements/ Tribology	5503	
		Fluid engineering	5504	
		Thermal engineering	5505	
		Dynamics/Control	5506	
		Intelligent mechanics/ Mechanical systems	5507	
	Electrical and electronic engineering	Power engineering/Power conversion/Electric machinery	5601	
		Electronic materials/ Electric materials	5602	
		Electron device/ Electronic equipment	5603	
		Communication/ Network engineering	5604	
		Measurement engineering	5605	
		Control engineering/System engineering	5606	
	Civil engineering	Civil engineering materials/ Construction/ Construction management	5701	
		Structural engineering/ Earthquake engineering/ Maintenance management engineering	5702	
		Geotechnical engineering	5703	
		Hydraulic engineering	5704	
		Civil engineering project/ Traffic engineering	5705	
		Civil and environmental engineering	5706	
	Architecture and building engineering	Building structures/Materials	5801	
		Architectural environment/ Equipment	5802	
		Town planning/ Architectural planning	5803	
		Architectural history/Design	5804	
	Material engineering	Physical properties of metals/Metal-base materials	5901	
		Inorganic materials/Physical properties	5902	
		Composite materials/Surface and interface engineering	5903	
		Structural/Functional materials	5904	
		Material processing/Microstructural control engineering	5905	
		Metal making/Resorce production engineering	5906	
	Process/Chemical engineering	Properties in chemical engineering process/Transfer operation/Unit operation	6001	
		Reaction engineering/Process system	6002	
		Catalyst/Resource chemical process	6003	
		Biofunction/Bioprocess	6004	
	Integrated engineering	Aerospace engineering	6101	
		Naval and maritime engineering	6102	
		Earth system and resources engineering	6103	
		Nuclear fusion studies	6104	
		Nuclear engineering	6105	
		Energy engineering	6106	

Category: Biological Sciences

Area	Discipline	Research Field	Item Number	Remark
Biological Sciences	Neuroscience	Neurophysiology / General neuroscience	6201	
		Nerve anatomy/Neuropathology	6202	A
				B
		Neurochemistry/ Neuropharmacology	6203	
	Laboratory animal science	Laboratory animal science	6301	
	Oncology	Tumor biology	6401	A
				B
		Tumor diagnostics	6402	
		Tumor therapeutics	6403	
	Genome science	Genome biology	6501	
		Medical genome science	6502	
		System genome science	6503	
	Conservation of biological resources	Conservation of biological resources	6601	
Biology	Biological Science	Molecular biology	6701	
		Structural biochemistry	6702	
		Functional biochemistry	6703	
		Biophysics	6704	
		Cell biology	6705	
		Developmental biology	6706	
	Basic biology	Plant molecular biology/Plant physiology	6801	
		Morphology/Structure	6802	
		Animal physiology/Animal behavior	6803	
		Genetics/Chromosome dynamics	6804	
		Evolutionary biology	6805	
		Biodiversity/Systematics	6806	
		Ecology/Environment	6807	
	Anthropology	Physical anthropology	6901	
		Applied anthropology	6902	
Agricultural sciences	Plant production and environmental agriculture	Science in genetics and breeding	7001	
		Crop production science	7002	
		Horticultural science	7003	
		Plant protection science	7004	A
				B
	Agricultural chemistry	Plant nutrition/Soil science	7101	
		Applied microbiology	7102	
		Applied biochemistry	7103	
		Bioorganic chemistry	7104	
		Food science	7105	
	Forest and forest products science	Forest science	7201	
		Wood science	7202	
	Applied aquatic science	Aquatic bioproduction science	7301	A
				B
		Aquatic life science	7302	
	Agricultural science in society and economy	Agricultural science in management and economy	7401	
		Agricultural science in rural society and development	7402	
	Agro-engineering	Rural environmental engineering/Planning	7501	
		Agricultural environmental engineering/Agricultural information engineering	7502	A
				B
	Animal life science	Animal production science	7601	A
				B
		Veterinary medical science	7602	A
				B
		Integrative animal science	7603	A
				B
	Boundary agriculture	Insect science	7701	
		Environmental agriculture(including landscape science)	7702	A
				B
		Applied molecular and cellular biology	7703	
Medicine, dentistry, and pharmacy	Pharmacy	Chemical pharmacy	7801	
		Physical pharmacy	7802	
		Biological pharmacy	7803	
		Pharmacology in pharmacy	7804	
		Natural medicines	7805	
		Drug development chemistry	7806	
		Environmental and hygienic pharmacy	7807	
		Medical pharmacy	7808	※

Area	Discipline	Research Field	Item Number	Remark
Medicine, dentistry, and pharmacy	Basic medicine	General anatomy (including histology/embryology)	7901	※
		General physiology	7902	
		Environmental physiology (including physical medicine and nutritional physiology)	7903	
		General pharmacology	7904	
		General medical chemistry	7905	
		Pathological medical chemistry	7906	
		Human genetics	7907	
		Human pathology	7908	※
		Experimental pathology	7909	※
		Parasitology (including sanitary zoology)	7910	
		Bacteriology (including mycology)	7911	
		Virology	7912	
		Immunology	7913	
	Boundary medicine	Medical sociology	8001	
		Applied pharmacology	8002	
		Laboratory medicine	8003	
		Pain science	8004	
	Society medicine	Epidemiology and preventive medicine	8101	
		Hygiene and public health	8102	
		Medical and hospital management	8103	
		Legal medicine	8104	
	Clinical internal medicine	General internal medicine (including psychosomatic medicine)	8201	
		Gastroenterology	8202	※
		Cardiovascular medicine	8203	※
		Respiratory organ internal medicine	8204	※
		Kidney internal medicine	8205	※
		Neurology	8206	※
		Metabolomics	8207	※
		Endocrinology	8208	
		Hematology	8209	※
		Collagenous pathology/ Allergology	8210	※
		Infectious disease medicine	8211	
		Pediatrics	8212	※
		Embryonic/Neonatal medicine	8213	
		Dermatology	8214	※
		Psychiatric science	8215	※
		Radiation science	8216	※
	Clinical surgery	General surgery	8301	※
		Digestive surgery	8302	※
		Cardiovascular surgery	8303	※
		Respiratory surgery	8304	※
		Neurosurgery	8305	※
		Orthopaedic surgery	8306	※
		Anesthesiology	8307	※
		Urology	8308	※
		Obstetrics and gynecology	8309	※
		Otorhinolaryngology	8310	※
		Ophthalmology	8311	※
		Pediatric surgery	8312	
		Plastic surgery	8313	
		Emergency medicine	8314	
	Dentistry	Morphological basic dentistry	8401	
		Functional basic dentistry	8402	
		Pathobiological dentistry/ Dental radiology	8403	
		Conservative dentistry	8404	
		Prosthodontics/ Dental materials science and engineering	8405	
		Dental engineering/ Regenerative dentistry	8406	
		Surgical dentistry	8407	※
		Orthodontics/Pediatric dentistry	8408	
		Periodontology	8409	
		Social dentistry	8410	
	Nursing	Fundamental nursing	8501	
		Clinical nursing	8502	
		Lifelong developmental nursing	8503	
		Gerontological nursing	8504	
		Community health nursing	8505	

(2) Grants-in-Aid for Scientific Research FY2013 List of Categories, Areas, Disciplines and Research Fields

○ List of Disciplines and Research Fields with a Time Limit

Area	Detail	Item Number	Set Period
Bioethics	"Bioethics" is the field which mainly treats ethical aspects of life. However, it is an interdisciplinary field which not only treats various humanity fields, such as philosophy, ethics, sociology, law, economics, politics, cultural anthropology and history of technology but also overcrossing with a number of scientific fields such as biology, bio-science, anthropology, genetics, public health, pharmacology, basic medicine, clinical medicine , forensic medicine and nursing. Bioethics was founded in the USA in the 1970s, and its importance has been acknowledged widely throughout the world, especially in an era where genetic engineering, biotechnology and state-of-the-art medical technology are rapidly developing. In this field, many problems such as informed consent, medical decision making, abortion, genetic diagnosis, surrogate birth, brain death and transplantation, euthanasia and death with dignity, terminal care, ethics in nursing, human clone research, animal experimentation, genetic modification and so on are left unsolved. We sincerely hope that many ambitious researchers will endeavor in these areas of study.	9043	FY2011 ― FY2013
Tourism Studies	The academic development of tourism studies complements the policy of promoting Japan as a tourism-oriented country from a scientific viewpoint. Until now, interdisciplinary scientific research on tourism has been carried out from diverse perspectives, such as, for example, "ecotourism", "green" tourism, health tourism, "new" tourism (such as, for example, industrial and cultural tourism), the economic effects of tourism, the influence of tourism on regional communities and culture, town development and regional promotion through tourism, international tourism policy, the behavior and psychology of tourists, etc. These research topics have been extensively studied, in an interdisciplinary way, in every area of science, such as business administration, commercial science, economics, geography, sociology, psychology, civil engineering, urban engineering, architecture, environmental studies, etc. In each area, research activities on tourism have intensified. Nevertheless, in order to further the development of tourism studies academically, it is necessary to harmonize these dispersed research areas through interdisciplinary study. In this area, JSPS expects to promote the research activities ranging from basic theory concerning the original development of tourism studies to various kinds of applied research, in addition to the promotion of expansive research that entails a practical and academic approach, and that contributes to the development of those economic and social sectors engaged in tourism.	9044	
Reliable environmental measurement methods	In order to understand totally the relation between life and earth environment and to continue the reliable environment of the earth, it is required to develop a new measurement methods based on a new metrology. In this field, new measurement methods are developed to understand a safe life, a food safety, a medical safety, and a reliable environment. Especially, a super selective and wide dynamic range analytic method, a mobile and energy-saving measurement instrument, an imaging technique, super-selective analytical reagents, a new detection method of bio-related micro particle such as virus and pollen are highly required. In order to achieve the reliable environmental measurement methods, a wide approach is expected from medical, agricultural, pharmaceutical, environmental fields, in addition to scientific and engineering fields.	9045	

Area	Detail	Item Number	Set Period
epigenetics	The regulation of gene expression is not achieved exclusively by the nucleotide sequence. The expression of genetic information is regulated by stable and yet plastic control mechanisms collectively referred to as epigenetics, that is, chemical and structural modifications of chromatin composed of genomic DNA and interacting proteins such as histones. Currently, epigenetics is a major research focus in the life sciences because of its demonstrated involvement in a wide variety of biological phenomena including embryogenesis, tissue-specific gene expression, genome imprinting, aging, tumorigenesis, neurodegenerative diseases and somatic cell cloning. JSPS is expecting ambitious research projects along these lines, which go beyond the frameworks of biological science disciplines such as genomics, molecular biology, cell biology, biochemistry, developmental biology, genetics and neuroscience, with the goal of elucidating the basic principles of epigenetics (operating principles, regulatory mechanisms and breakdown) commonly observed in the above-mentioned biological phenomena.	9046	FY2011 — FY2013
Integrated Nutrition Science	Nutrition science has contributed greatly to health promotion and improvement of physical strength/shape through the understandings of physiology, nutrients, and metabolism necessary for growth and maintenance of life. However, new issues such as overeating, food satiation, lifestyle-related diseases, stress, and aging, have been emerged. Recent advances in life science and analytical informatics technology enabled new approaches in this field: molecules, cells, laboratory animals to human population can now be included for research design. In order for such expansion in nutrition science to accelerate, establishment of a cross-sectoral research community beyond the existing frame, including eating habits studies, applied health science, food science, and clinical medicine is required. The goal of this new research field is to contribute toward maintaining/promoting health, preventing diseases, and potentiating therapeutic effects in the complex and diverse modern society. A broad range of studies with aim to build the platform of nutritional science and put the accomplishment into practice is encouraged. Nutrition science has contributed greatly to health promotion and improvement of physical strength/shape through the understandings of physiology, nutrients, and metabolism necessary for growth and maintenance of life. However, new issues such as overeating, food satiation, lifestyle-related diseases, stress, and aging, have been emerged. Recent advances in life science and analytical informatics technology enabled new approaches in this field: molecules, cells, laboratory animals to human population can now be included for research design. In order for such expansion in nutrition science to accelerate, establishment of a cross-sectoral research community beyond the existing frame, including eating habits studies, applied health science, food science, and clinical medicine is required. The goal of this new research field is to contribute toward maintaining/promoting health, preventing diseases, and potentiating therapeutic effects in the complex and diverse modern society. A broad range of studies with aim to build the platform of nutritional science and put the accomplishment into practice is encouraged.	9047	
Regenerative medicine	Human beings are composed of many organs and various types of cells within. These cells must self-renew themselves even after birth as well as during development, to maintain the homeostasis of the organ and to maintain their life against various environmental stresses. Regenerative medicine intends to repair and regenerate the damaged tissue/organ by manually controlling the self-renewing system, which resides endogenously in the organisms. Three-step approach, which includes in vitro, in vivo, and translational researches, is required for clinical application of the regenerative medicine. Identification of the cell-type specific differentiation factor and the establishment of the cell-type specific protocol for effective differentiation and purification system using somatic stem cells, embryonic stem (ES) cells, and induced pluripotent stem (iPS) cells are the important goals of in vitro researches. Thereafter, in vivo approaches using laboratory animals is important to establish the method to deliver the cells and to keep them alive and functional at the damaged lesion, in order to re-organize the damaged organ within the living organisms. To reach the final goal toward the clinical application, in vitro and in vivo findings should be gathered and translated into clinical medicine. Immunologic problem, such as rejection, or the differences in the organ size between experimental animals and humans are the challenges that should be solved in translational researches. Development of tissue engineering technology is one of the helpful candidates for solving those problems. Regenerative medicine is expected to become a new hope for the patients of refractory disorders such as heart diseases and neurodegenerative diseases. Moreover, regenerative medicine could reduce the inflated healthcare cost, which is becoming a big economic issue in the advanced country, by improving the quality of life of the elderly in the graying society. We are eager for the challenging proposals that would greatly advance this field.	9048	

Area	Detail	Item Number	Set Period
Care Studies	The twenty-first century is expected to be a “century of care”, faced with such problems as an aging society coupled with a declining birthrate, ethical issues in medical treatment and nursing, mental difficulties suffered by people of all ages, and other issues. The English word “care” has been translated into various Japanese words which refer to nursing, care-giving, care-taking, treatment, consideration, concern, etc., and these Japanese words had been used and discussed separately in diverse fields such like medical treatment, nursing, care-giving, welfare, psychology, education, ethics, philosophy, etc. Recently, however, the original word “care” came to be used in a broader sense, out of the necessity, for cross-field discussions, so as to avoid limiting the problems to a particular field by using a specific Japanese term. From the 1980s on, research on “cross-field” care emerged, and this trend rapidly developed after the enforcement of the Nursing Care Insurance in 2000. It is hoped that care studies will be established as an independent area of study through multi-disciplinary participation by researchers of various scholarly fields, which include not only clinical investigation and on-the-spot investigation, but also fundamental theoretical research based on investigation of the literature and international academic exchange. JSPS is expecting research that will contribute significantly to the development of this field.	9049	FY2012 — FY2014
Cultural Research	This category includes broad research areas in the humanities and social sciences with special reference to language and culture. These are interdisciplinary research fields such as research in culture, cultural studies, cultural history, comparative culture (comparative literature), cross-cultural understanding/international understanding,international exchange, history of cultural interexchange, nationalism,post-colonialism, identity, migration and so forth. This category does not exclude fields where sociological,economical and legal knowledge methodology and interest is involved, and encourages a broadened approach with the possibility of interdisciplinary research. For example, within research on nationalism, it may be necessary to include considerations of research on culture, sociology, politics and law, among others, but in addition to consideration of research results from other fields, this kind of research should increase the possibilities of interdisciplinary research while it absorbs the various results and outcomes of cultural research to contribute to the positive development of the field.	9050	
Land, Housing and Real Estate Study	In our modern society of aging and decrease of birthrate, the research on the land, housing and real estate is extending to cover the vitalization in city center, community development, vitalization in urban and regional area, property market, real estate finance, valuation of real estate, bad debt problem, real estate securitization. The land, housing and real estate, whose values are occupying large portion of our gross national wealth, need to be appropriately evaluated and efficiently used by households, firms, and public organizations for improving our quality of life. This subject expects the inter-disciplinary study of economics, urban planning/social engineering, law, social welfare, sociology, psychology, political science, architecture, and housing e.t.c.	9051	
Measurement Science and Technology in Omics	As a newly emerging area of study in natural sciences, "Measurement Science and Technology in Omics" deals with measurement principles and techniques in omics sciences, which include proteomics, metabolomics (biological and natural objects, cells and etc.), metabonomics (pharmacology), glycomics, lipidomics, metallomics, adductomics, genomics, transcriptomics and combined omics (e.g., glycoproteomics). The suffix -ome as used in molecular biology refers to a totality of some sort, and the related suffix -omics is used to address the objects of study of such fields. Hence, "Measurement Science and Technology in Omics" is based on identification and analyses of molecules in a wide range of scientific fields. Each omics has its own molecular characteristics and requires intrinsic measurement techniques. For example, sugar chains are different from chains of lipids and those of peptides/protein. Measurement techniques in this area include non-destructive measurement, visualization/imaging analyses, on-site measurement, spectroscopy, mass spectrometry, ion measurement, and laser measurement, including information processing of measured data. Mass spectrometry research in this area covers qualitative and quantitative analyses, structural analyses, functional analyses, molecule-based analyses, and their application research. We are looking forward to receiving many good proposals which will greatly contribute to this area of research.	9052	

Area	Detail	Item Number	Set Period
Space life science	Space life science is a research field rich in originality and covering a wide range of sciences such as astrobiology which uses space environment for studies on the origin of life, gravity- and radiation-biology which aim to clarify adaptation and survival mechanisms of microbes, plants and animals, and human, by bringing them to the space environment definitely different from the earth, and engineering, medical and agricultural sciences necessary for experiment performance and human expeditions in the space. It is anticipated that experiments accomplished in the space environment will elucidate the fundamental mechanisms by which diverse organisms arose, adapted and evolved on the earth. Besides, space life science is the only current discipline that can deal the issues related to promotion of space development and utilization, environmental preservation from extraterrestrial view points, education for next generations of space ages. We are eager for the challenging proposals that would greatly contribute to the advancement of this field.	9053	FY2012 — FY2014
Sleep Science	Sleep science comprises multidisciplinary research fields ranging from basic biology (physiology, pharmacology, molecular biology, psychology and behavioral science), clinical medicine (psychiatry, neurology, respiratory medicine, otolaryngology, oral surgery, dentistry), sociology, cultural science to engineering. Sleep science has become an important research subject and has been gaining more and more attention worldwide from scientific interests as well as from social needs, partly because big traffic accidents occurred due to sleep disorders. We expect many highly motivated research proposals from various fields including basic research (sleep, circadian rhythms, or biological clock), clinical research (the pathophysiology and/or treatment of sleep abnormalities, parasomnia, or sleep disorders), sociology, engineering and cultural science.	9054	
Natural Disaster Issues and Humanities/Social Sciences	Large natural disasters, such as the Great East Japan Earthquake, cause immense human loss and material damage, posing various risks to Japanese society. To overcome these risks, research centered on civil engineering and construction is, of course, needed to get a grasp of the damage that can be caused to the physical environment and infrastructure and to devise measures for their restoration and reconstruction. Of concomitant importance is a need to advance systematic research on socio-economic damage and measures for its recovery and reconstruction as well. Required for this purpose are a diversified research approach with cross-disciplinarity, sustained research support, capability to respond to a wide expanse of affected areas and damage regionality, and an enhanced knowledge base for supporting restoration and mitigating damage in the future. To this end, thematic research on “earthquake disaster issues” will need to be advanced across a spectrum of humanities and social sciences fields. In this area, research will need to be undertaken in fields that do not fit neatly within existing research field categories. As research will need to be advanced from new perspective, an opportunity is accorded to systematically establish a new domain oriented to disaster issues within the humanities and social sciences. A strong demand to do this opens up opportunities for research that transcends topic setting within existing fields and enables research advancement and knowledge sharing across fields of the humanities and social sciences in ways that make it possible to gain a full-scope, cross-disciplinary grasp of earthquake damage and restoration.	9055	FY2013 — FY2015

Area	Detail	Item Number	Set Period
Reconstruction Agriculture	Agricultural science covers many issues related to agriculture; however, it has not envisioned earthquake damage on a scale of the Great East Japan Earthquake, leaving us unprepared to quickly and comprehensively respond to society's needs, particularly restoration and reconstruction. This has given rise to a need for a field of agriculture capable of flexibly addressing earthquake damage-related issues over a 1000-year time spectrum in designing sustainable agrarian, mountain and coastal communities and in building agricultural, forestry and fishery industries. Reconstruction agriculture is not a field aimed just at recovering the current earthquake damage; but, employing principals of prevention, it's expected to be developed with an aim to restoring agrarian, mountain and coastal communities damaged by storms and flooding caused by climate change or affected by unanticipated global issues or external pressures. The field of reconstruction agriculture comprises four areas: Planning, mechanism elucidation and effect analysis, technological development, and human resource development. Advancing research in them is expected to contribute significantly to the development of this field. Planning: Toward restoring earthquake damage, planning science related to agricultural, forestry and fishery communities; disaster risk management; socio-economic system design as related to damage recovery in agricultural, forestry and fishery communities Mechanism elucidation and impact assessment: Ecosystems affected by large-scale damage (e.g., river basins, forests, agricultural land, coastal areas, oceans), including monitoring, impact assessment, affect of radiation on crops, fish and livestock (analyzing migration and accumulation of radioactive substances, metabolic analysis); effect of radiation in the processing of plant, meat and fish products (dynamic analysis of radioactive substances) Technological development: Technology for restoring the infrastructure of agricultural, forestry and fishery communities; technology for desalinating and decontaminating agricultural land and residential areas; environmental restoration, purification and dilution technologies (e.g., microorganisms, bio-phytoremediation using plants, dilution/removal of radioactive substances from water systems); breeding salt-resistant plants; dilution and removal technologies for radiation-contaminated biomass; technology for converting and using woody waste as biomass fuel; creating systems for the emergency provision of perishable foods (vegetable factories); Human resource development: Implementing science communication and outreach programs in the reconstruction agricultural domain	9056	FY2013 — FY2015
Public Policy	Public policy research entails economic policy, urban planning and disaster-response policy on both the central and regional levels. A wide definition also includes policy, strategy, implementation and assessment stratums. Many of the research papers published in the reports, journals and bulletins of the Public Policy Studies Association JAPAN over the past 15 years can be attributed to the fields of law, political science and economics. What can also be seen in them is the emergence of a new research field called policy economics, created through collaboration and linkage among existing disciplines. One typical example of such merger is a field born out of collaboration between law and economics. Political economics became main stream for at least some period of time in the worldwide political science domain. Public economics advanced around the field of economics (by James M. Buchanan and others) has become a required component of high-level political-science education. In public policy literature, its formation process is the object of political-science analysis. Regarding policy concepts, results of public policy has been produced in various research areas, including, economics, welfare, the environment and urban planning. In actuating these results, only when various policies, laws, ordinance and rules are established on the central and local government levels, they give it generality. Furthermore, when the validity of public policy comes into question, judicial precedents in the courts are analyzed. A trend can be seen in an expansion of the social sciences under the name of public policy, which merges existing disciplines with disciples in a variety of other research domains. Collaboration and linkage among the fields of social sciences can elevate the standard of research in each of them, and potentially lead to the creation of new research fields. The key words in the public policy domain include law and economics, political economics, policy assessment, urban planning, welfare policy, environmental policy, governance, NGO/NPO, public economics, public choice, national debt/ budget deficits, financing/bubble, strategic theory, and international public policy. Advancing research in them is expected to contribute significantly to the development of this field.	9057	

(Note 1)
This table, in combination with the main table, applies only to "Scientific Research (C)", screening division "General".
(Note 2)
The set period is the fiscal year when the call for proposals is organized. Notwithstanding the set period, research projects of 3 to 5 years are being sought.

Attached Table 3 Appendix Table of Keywords
"Categories, Areas, Disciplines and Research Fields"

1) The first stage of the screening of the research fields followed by A or B in each category of the division column is carried out in two separate groups. The basis for this division in two groups is the keywords shown in all the research categories (except for "Overseas Academic Research"). Make sure to select A or B based on the keyword, when applying for the research fields in the list.

2) The first stage of the screening of the research fields followed by the numbers 1 to 5 in each category of the division column is carried out in separate groups. The basis for this division in separate groups is the keywords shown in "Scientific Research (C)". Make sure to select a number from 1 to 5 based on the keyword, when applying for the research fields in the list for "Scientific Research (C)".

Category: Integrated Disciplines

Area: Informatics

Discipline: Principles of Informatics

Item Number	Research Field		Screening Sub-panel Number / Keyword
1001	Theory of informatics	1	Theory of computation
		2	Automata theory / Formal language theory
		3	Mathematical theory of programs
		4	Computational complexity theory
		5	Algorithm theory
		6	Cryptosystem
		7	Discrete structure
		8	Computational learning theory
		9	Theory of quantum computation
		10	Mathematical logic
1002	Mathematical informatics	1	Optimization theory
		2	Mathematical finance
		3	Mathematical system theory
		4	System control theory
		5	System analysis
		6	System methodology
		7	System modeling
		8	System simulation
		9	Combinatorial optimization
		10	Queueing theory
1003	Statistical science	1	Research survey and experimental design
		2	Multivariate analysis
		3	Time series analysis
		4	Classification and pattern recognition
		5	Statistical inference
		6	Computational statistics and computer aided statistics
		7	Statistical prediction and control
		8	Model selection
		9	Pharmaceutical / genome statistical analysis
		10	Behaviormetrics
		11	Spatial / environmental statistics
		12	Statistics education
		13	Statistical quality control
		14	Statistical learning theory
		15	Social research and analysis plan
		16	Data science

Discipline: Principles of Informatics

Item Number	Research Field		Screening Sub-panel Number / Keyword
1101	Computer system	1	Computer architecture
		2	Circuit and system
		3	LSI design technology
		4	Reconfigurable system
		5	High-dependable architecture
		6	Low power technology
		7	hardware / software co-design
		8	Embedded system

(Discipline: Principles of Informatics)

Item Number	Research Field		Screening Sub-panel Number / Keyword
1102	Software	1	Programming language
		2	Programming methodology
		3	Programming language processor
		4	Parallel distributed computing
		5	Operating system
		6	High-dependable system
		7	Virtualization technology
		8	Software security
		9	Cloud computing infrastructure
		10	Software engineering
		11	Specification and verification
		12	Development environment
		13	Development management
1103	Information network	1	Network architecture
		2	Network protocol
		3	Mobile network
		4	Overlay network
		5	Sensor network
		6	Traffic engineering
		7	Network management technology
		8	Ubiquitous computing
		9	Service prosivion infrastructure
		10	Information home appliances
1104	Multimedia database	1	Data model
		2	Relational database
		3	Database system
		4	Multimedia information acquisition
		5	Multimedia information processing
		6	Multimedia information representation
		7	Multimedia information generation
		8	Information retrieval
		9	Structured document
		10	Content distribution and management
		11	Geographic information system
		12	Metadata
1105	High performance computing	1	Parallel processing
		2	Distributed processing
		3	Grid and Cloud computing
		4	Numerical analysis
		5	Visualization
		6	Computer graphics
		7	High performance computing application

（Discipline: Principles of Informatics）

Item Number	Research Field	Screening Sub-panel Number	Keyword
1106	Information security	1	Access control
		2	Personal identification
		3	Cryptography
		4	Authentication
		5	Security evaluation / audit
		6	Virus countermeasure
		7	Network security
		8	Unauthorized access countermeasure
		9	Software protection
		10	Privacy protection
		11	Information filtering

Discipline: Human informatics

Item Number	Research Field	Screening Sub-panel Number	Keyword
1201	Cognitive science	1	Evolution, development, learning
		2	Cognition, memory, education
		3	Thought, inference, problem solving
		4	Sensation, perception, kansei
		5	Emotion / Feeling / Behavior
		6	Cognitive psychology
		7	Comparative cognitive psychology
		8	Cognitive philosophy
		9	Brain cognitive science
		10	Cognitive linguistics
		11	Comparative decision making theory
		12	Cognitive engineering
		13	Cognitive archaeology
		14	Cognitive model
		15	Sociability
		16	Law and psychology
		17	Safety and human factor
1202	Perceptual information processing	1	Pattern recognition
		2	Image processing
		3	Computer vision
		4	Computational photography
		5	Human measurement
		6	Intelligent image editing
		7	Visual media processing
		8	Image database
		9	Speech processing
		10	Acoustic information processing
		11	Speech / Sound database
		12	Information sensing
		13	Sensor fusion
		14	Sensing devices / systems
		15	Tangible sensing
1203	Human interface and interaction	1	Human interface
		2	Multi-modal interface
		3	Human-computer interaction
		4	CSCW
		5	Groupware
		6	Virtual reality
		7	Augmented Reality
		8	Mixed reality
		9	Realistic communication
		10	Wearable device
		11	Usability
		12	Ergonomics

（Discipline: Human informatics）

Item Number	Research Field	Screening Sub-panel Number	Keyword
1204	Intelligent informatics	1	Search, logic, inference algorithms
		2	Machine learning
		3	Knowledge acquisition
		4	Knowledge-based system
		5	Intelligent system architecture
		6	Intelligent information processing
		7	Natural language processing
		8	Knowledge discovery and data mining
		9	Ontology
		10	Human-agent interaction
		11	Multi-agent system
1205	Soft computing	1	Neural network
		2	Genetic algorithm
		3	Fuzzy theory
		4	Chaos
		5	Fractal
		6	Complex systems
		7	Probabilistic information processing
1206	Intelligent robotics	1	Intelligent robot
		2	Behavior and environment recognition
		3	Motion planning
		4	Sensory behavior system
		5	Autonomous system
		6	Digital human model
		7	Real world information processing
		8	Physical agents
		9	Intelligent roomAnimation
1207	Kansei informatics	1	Kansei design
		2	Kansei expression
		3	Kansei recognition
		4	Kansei cognitive science, Kansei phychology
		5	Kansei robotics
		6	Kansei measurement evaluation
		7	Ambiguity and kansei
		8	Kansei information processing
		9	Kansei database
		10	Kansei interface
		11	Kansei physiology
		12	Kansei material products
		13	Sensitivity industry
		14	Kansei environmental science
		15	Kansei sociology
		16	Kansei philosophy
		17	Kansei pedagogy
		18	Kansei brain science
		19	Kansei management

Discipline: Frontiers of informatics

Item Number	Research Field	Screening Sub-panel Number / Keyword	
1301	Life / Health / Medical informatics	1	Bioinformatics
		2	Genome information processing
		3	Proteome information processing
		4	Computer simulation
		5	Life informatics
		6	Biological information
		7	Neuroinformatics
		8	Neural information processing
		9	Artificial life system
		10	Molecular computing
		11	DNA computing
		12	Medical information
		13	Diagnostic imaging
		14	Remote diagnosis and treatment
		15	Sanitation information
		16	Health information
		17	Medical image
		18	Intracellular logistics analysis
1302	Web informatics, Service informatics	A [Web informatics]	
		1	Web system
		2	Web computing
		3	Social web
		4	Semantic web
		5	Recommendation system
		6	Web service
		7	Web mining
		8	Web intelligence
		9	Social network analysis
		10	Netwrok community
		B [Service informatics]	
		11	Service engineering
		12	Service management
		13	Quality of Service
		14	Queue
		15	Business model
		16	Service-oriented architecture
		17	Knowledge management
		18	Educational services
		19	Medical welfare service
		20	Intelligent transport systems
		21	Financial service
		22	Social and environmental service
		23	Smart grid
		24	Management of technology

（Discipline: Frontiers of informatics）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
1303	Library and information science/ Humanistic social informatics	A [Library and information science]	
		1	Library science
		2	Information services
		3	Library information systems
		4	Digital archives
		5	Information organization
		6	Information retrieval
		7	Information media
		8	Bibliometrics and scientometrics
		9	Construction and management of information resources
		B [Humanistic social informatics]	
		10	Information ethics
		11	Media environment
		12	Literature information
		13	Historical information
		14	Information sociology
		15	Law information
		16	Information economics
		17	Management information
		18	Educational information
		19	Art information
		20	Medical information
		21	Science and technology information
		22	Intellectual property information
		23	Geographic information
		24	Local informatization
1304	Learning support system	1	Media Literacy
		2	Learning media
		3	Social media
		4	Learning content development support
		5	Learning management system
		6	Intelligent Learning support system
		7	Remote learning
		8	Distributed collaborative learnig support system
		9	Project-based learning support system
		10	e-Learning
		11	Use and evaluation
1305	Entertainment and game informatics	1	Music information processing
		2	Performance support
		3	3D content and animation
		4	Game programming
		5	Network entertainment
		6	Media art
		7	Interactive art
		8	Digital archives
		9	Digital museum / Virtual museum
		10	Information culture

Area: Environmental science

Discipline: Environmental analyses and evaluation

Item Number	Research Field		Screening Sub-panel Number	Keyword
1401	Environmental dynamic analysis		1	Environmental change
			2	Biogeochemical cycle
			3	Environmental measurements
			4	Environmental model
			5	Environmental information
			6	Global warming
			7	Global change of water cycle
			8	Environmental monitoring of the polar regions
			9	Chemical oceanography
			10	Biological oceanography
			11	Remote sensing
1402	Risk sciences of radiation and chemicals	A	1	Environmental radiation
			2	Protection
			3	Basic process
			4	Dosimetry and assessment
			5	Damage
			6	Response
			7	Repair
			8	Sensitivity
			9	Impact on life
			10	Risk assessment
			11	Radiation management and control
		B	12	Toxicology
			13	Toxic substance to human
			14	Estimation of trace chemicals pollution
			15	Endocrine disrupting substances
1403	Environmental impact assessment		1	Terrestrial, aquatic, and atmospheric impact assessment
			2	Impact assessment on ecosystem
			3	Impact assessment methods
			4	Impact assessment on human health
			5	Environmental impact assessment on the future generation
			6	Human activities in polar regions
			7	Environmental monitoring
			8	Model simulation
			9	Environmental impact assessment

Discipline: Environmental conservation

Item Number	Research Field	Screening Sub-panel Number	Keyword
1501	Environmental engineering and reduction of environmental burden	1	Reduction of wastewater, exhaust gas and solid wastes
		2	Appropriate treatment and disposal
		3	Closed process and integrated pollution control
		4	Pollutants separation and removal technologies
		5	Control of noise, vibration and ground subsidence
		6	Environmental analysis
		7	Simplified analysis and monitoring
1502	Modeling and technologies for environmental conservation and remediation	1	Environmental impact analysis
		2	Environmental pollution survey and evaluation
		3	Pollutants removal and remediation technologies
		4	Monitoring and modeling of pollutants behavior in environment
		5	Biological treatment and remediation
		6	Impact on environment and ecosystem
		7	Surface water, ground water and soil

（Discipline: Environmental conservation）

Item Number	Research Field	Screening Sub-panel Number	Keyword
1503	Environmental conscious materials and recycle	1	Design and production of recycle materials
		2	Reduction, reuse, recycle (3R)
		3	Recovery of valuables
		4	Separation and purification
		5	Appropriate treatment and disposal
		6	Recycling and life cycle assessment(LCA)
		7	Environmental conscious design
		8	Green productions
		9	Zero-emission
		10	Chemistry for material recycle
1504	Environmental risk control and evaluation	1	Identification and analytical evaluation of pollutants
		2	Monitoring
		3	Transport, diffusion and accumulation of pollutants
		4	Environmental criteria and standards
		5	Life environment and health items
		6	Emission quality standards
		7	Evaluation of cross-border pollution
		8	Chemicals management
		9	Exposure scenario
		10	Risk evaluation
		11	Precautionaly principle
		12	Biodegradation and bioaccumulation
		13	Genetic and ecological toxicities
		14	Risk communication

Discipline: Sustainable and environmental system development

Item Number	Research Field	Screening Sub-panel Number	Keyword
1601	Environmental and ecological symbiosis	1	Biodiversity
		2	Ecosystem functions and services
		3	Ecological risks
		4	Ecosystem impact analysis
		5	Ecosystem management and conservation
		6	Remote sensing
		7	Landscape and ecosystem
		8	Rehabilitation of environment ecosystem
		9	Mitigation
		10	Ecological engineering
1602	Design and evaluation of sustainable and environmental conscious system	1	Sound material recycle system
		2	Low carbon society
		3	Renewable energy
		4	Biomass utilization
		5	Design and planning of environmental conscious areas
		6	Water resources and water use system
		7	Industrial symbiosis
		8	Material and energy flow analysis
		9	Life cycle assessment (LCA)
		10	Integrated pollution prevention and control

Area: Complex systems

（Discipline: Sustainable and environmental system development）

Item Number	Research Field	Screening Sub-panel Number	Keyword
1603	Environmental policy and social systems	1	Environmental philosophy and ethics
		2	Environmental justice
		3	Environmental economics
		4	Environmental laws
		5	Environmental information
		6	Environmental geographical information
		7	Environmental education
		8	Environmental management
		9	Environment and social activities
		10	Environmental standard and auditing
		11	Consensus forming
		12	Environmental safety and security
		13	Corporate social responsibility
		14	Social and economical system
		15	Public system and management
		16	Sustainable development

Discipline: Design science

Item Number	Research Field	Screening Sub-panel Number	Keyword
1651	Design science	1	Information design(Communication, media, contents, interaction, interface)
		2	Environmental design (Architecture, Urban, Landscape)
		3	Industrial design (Product design, universal design)
		4	Art
		5	Aesthetics
		6	Design history
		7	Theory for design
		8	Design standard
		9	Design support
		10	3D modeling & acoustic modeling
		11	Analysis & evaluation for design
		12	Design education

Discipline: Human life science

Item Number	Research Field	Screening Sub-panel Number	Keyword
1701	Home economics/ Human life	1	Family resource management
		2	Family finance and consumer issues
		3	Family
		4	Lifestyle
		5	Information for living
		6	Human life and culture
		7	Life of the elderly
		8	Well-being for individual and family
		9	Child care, Child rearing
		10	Home economics education
		11	Consumer education
		12	Philosophy of home economics
		13	Materials and goods for living
		14	Design for living
		15	Manufacturing , Skills of making products for daily life
1702	Clothing life/Dwelling life	1	Human life and clothing
		2	Clothing and environment
		3	Dyeing and finishing treatment
		4	Clothing design and manufacturing
		5	Clothing materials
		6	History of costume
		7	Clothing culture
		8	Clothing psychology
		9	Dwelling life
		10	Planning of housing
		11	Housing management
		12	Housing history
		13	Interior, housing and living environment design
		14	Dwelling environment and equipment
		15	Housing structure and material
		16	City planning and community policy
		17	Child-raising environment
		18	Housing for the elderly
		19	Housing environment for the elderly and people with disabilities
		20	Dwelling culture
		21	Housing information and housing education

(Discipline: Human life science)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1703	Eating habits	A [Food and cooking]		
			1	Cooking and processing
			2	Food storage
			3	Sensory evaluation
			4	Food materials
			5	Cooking and functional constituent
			6	Food service
			7	Food culture
			8	Texture
			9	Mastication and swallowing
		B [Diet and health]		
			10	Health and dietary life
			11	Diet and nutrition
			12	Dietary education
			13	Dietary habits
			14	Dietary behavior
			15	Dietary information
			16	Food with health claims
			17	Food and environment
			18	Diet evaluation
			19	Food management

Discipline: Science education/Educational technology

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1801	Science education	1	1	Higher education(Mathematics, Physics, Chemistry, Biology, Information science, Astronomy, Earth and planetary science, Interdisciplinary science)
			2	Elementary and secondary education(Arithmetic・Mathematics, Natural science, Information science)
			3	Engineering education
		2	4	Science literacy
			5	Experiment/Observation
			6	Science education curriculum
			7	Environmental education
			8	Industrial technology education
			9	Science and sociocultural aspect
			10	Science teacher training
			11	Science communication
1802	Educational technology	1	1	Curriculum/Pedagogy development
			2	Teaching-learning support systems
			3	Distributed collaborative learning system
			4	Human interface
		2	5	Instructional materials information system
			6	Utilization of media
			7	Distance education
			8	E-learning
			9	Information-related education
			10	Media education
			11	Learning environment
			12	Teacher's education
			13	Classroom instruction

Discipline: Sociology/History of science and technology

Item Number	Research Field	Screening Sub-panel Number / Keyword	
1901	Sociology/ History of science and technology	1	Sociology of science
		2	History of science
		3	History of technology
		4	Medical history
		5	Industrial archaeology
		6	Philosophy of science/Theory of science
		7	Science, technology and society

Discipline: Cultural assets study and museology

Item Number	Research Field	Screening Sub-panel Number / Keyword		
2001	Cultural assets study and museology	A	1	Dating methods
			2	Material analysis
			3	Production techniques
			4	Conservation science
			5	Archaeological prospection
			6	Plant and animal residues/Human remains
			7	Cultural property/Cultural heritage
			8	Cultural resources
			9	Cultural property policy
		B	10	Museum Informatics
			11	Museum Education, Museum Pedagogy
			12	Museum Information Systems, Museum Informatics
			13	Museum Business Management
			14	Public Finance and Administration of Museums
			15	Museum Material Resources
			16	History of Museology

Discipline: Geography

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2101	Geography	1	Geography in general
		2	Land use/Landscape
		3	Environmental system
		4	Regional planning
		5	Cartography/Regional geography/Geography education
		6	Geomorphology
		7	Climatology
		8	Hydrology
		9	Geographic information system
		10	Remote sensing
		11	Vegetation/Soil
		12	Tourism

Discipline: Social/Safety system science

Item Number	Research Field	Screening Sub-panel Number / Keyword		
2201	Social systems engineering/ Safety system	A [Social systems engineering]		
			1	Social engineering
			2	Social system
			3	Policy science
			4	Development planning
			5	Management engineering
			6	Management system
			7	Operations research
			8	Quality control
			9	Industrial engineering
			10	Modeling
			11	Logistics
			12	Marketing
			13	Finance
			14	Project management
			15	Environmental management
		B [Safety system]		
			16	Safety engineering
			17	Safety concerning products, facilities, systems
			18	Safety risk management
			19	Crisis management
			20	Fire and explosion prevention and protection
			21	Safety information
			22	Social technology for security (evacuation、mass guidance、information distribution、hazard map)
			23	Risk-based engineering
			24	Engineering diagnosis, regeneration, maintenance management
			25	Reliability of machinery and human
			26	Occupational safety and health

（Discipline: Social/Safety system science）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2202	Natural disaster / Disaster prevention science	A [Earthquake and volcano disaster mitigation]	
		1	Seismic motion
		2	Liquefaction
		3	Active fault
		4	Tsunami
		5	Volcanic eruption
		6	Volcanic ejecta/Debris flow
		7	Seismic hazard
		8	Volcanic hazard
		9	Damage prediction/Analysis/Mitigation measures
		10	Disaster mitigation and buildings
		B [Natural disasters]	
		11	Meteorological disasters
		12	Hydrological disasters
		13	Geo-hazard
		14	Landslide
		15	Drought
		16	Snow and ice disasters
		17	Natural disaster prediction/Analysis/Measures
		18	Lifeline disaster prevention
		19	Local disaster preparedness plan and policy
		20	Rehabilitation and reconstruction engineering
		21	Disaster risk assessment

Discipline: Biomedical engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2301	Biomedical engineering/ Biomaterial science and engineering	A [Biomedical engineering]	
		1	Medical imaging, Bioimaging
		2	Biological modeling, physiome
		3	Biological simulation
		4	Bioinformation and instrumentation
		5	Artificial Organs
		6	Engineering for regenerative medicine
		7	Biological properties
		8	Biomedical control and therapy
		9	Biomechanics
		10	Cell biomechanics
		11	Nano-Bio Systems
		12	Medical Physics
		13	Biomedical Ultrasound
		14	Physiologically active substances application
		15	Bio-inspired system
		16	Radiological Technology and Engineering
		B [Biomaterial science and engineering]	
		17	Biomaterials
		18	Biofunctional materials
		19	Cell and Tissue engineering Materials
		20	Biocompatible materials/Biosuitable materials
		21	Nano-biomaterials
		22	Materials for regenerative medicine and engineering
		23	Drug delivery system
		24	Stimuli-responsive materials
		25	Materials for genetic and nucleic acid engineering
2302	Medical systems	1	Medical Ultrasound System
		2	Medical imaging system
		3	Laboratory examination system
		4	Minimally invasive treatment system
		5	Remote diagnosis and treatment system
		6	Organ preservation and treatment system
		7	Medical information system
		8	Computational surgery
		9	Medical robotics
2303	Medical engineering assessment	1	Regulartory Science
		2	Safety validation
		3	Clinical studies
		4	Biomedical engineering ethics
		5	Medical devices

（Discipline: Biomedical engineering）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2304	Rehabilitation science/ Welfare engineering	A [Rehabilitation science]	
		1	Rehabilitation medicine
		2	Disability science
		3	Physical therapy
		4	Occupational therapy science
		5	Speech language and hearing therapy
		6	Social welfare and health science
		7	Artificial sensory organs
		8	Gerontology
		9	Clinical psychotherapy
		B [Welfare engineering]	
		10	Engineering for health and welfare
		11	Technology for activities of daily living
		12	Preventive care/Assistive technology
		13	Normalization
		14	Barrier-free system
		15	Universal design
		16	Robotics for welfare and nursing care
		17	Technology for substituting biological function
		18	Technical aid
		19	Human interface
		20	Nursing engineering

Discipline: Health/Sports science

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2401	Developmental mechanisms and the body works	A [Developmental mechanisms and the body works]	
		1	Educational physiology
		2	Physical systems science
		3	Biological information analysis
		4	Higher brain function science
		5	Physical growth developmental science
		6	Sensory and motor development studies
		B [Mental and physical education and culture]	
		7	Aesthetic education
		8	Physical environment theory
		9	Kinetic theory of leadership
		10	Pedagogy of physical education
		11	Fitness
		12	Cultural theories of physical movement
		13	Philosophy of the body
		14	Life and death education
		15	Psychology of physical education
		16	Affective science
		17	Outdoor education
		18	Dance education
		19	Gender education
		20	Adult life stage elderly gymnastics
		21	Martial arts theory
		22	Motion adaptation life science
2402	Sports science	A [Sports science]	
		1	Sports philosophy
		2	Sports history
		3	Sports psychology
		4	Sports science management
		5	Sports pedagogy
		6	Training science
		7	Sports biomechanics
		8	Coaching
		9	Sports talent
		10	Sports for the disabled
		11	Sports sociology
		12	Sports environment
		13	Cultural anthropology of sport
		B [Medical and sport sciences]	
		14	Sports physiology
		15	Sports biochemistry
		16	Sports nutrition
		17	Energy metabolism
		18	Training medical science
		19	Sports disorders
		20	Doping

（Discipline: Health/Sports science）

Item Number	Research Field	Screening Sub-panel Number / Keyword		
2403	Applied health science	A [Health education/Health promotion activities]		
			1	Health education
			2	Health promotion
			3	Safety propulsion/Safety education
			4	Pedagogy of health education
			5	Stress management
			6	Smoking/Drug abuse prevention education
			7	School health
			8	AIDS and sex education
			9	Health management
			10	Health information
			11	Nutritional guidance
			12	Physical and mental health
			13	Leisure/Recreation
		B [Applied medical health]		
			14	Lifestyle diseases
			15	Exercise prescription and exercise therapy
			16	Aging
			17	Sports medicine
			18	Sports immunology

Discipline: Childhood science

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2451	Childhood science (childhood environment science)	1	Health/Growth
		2	Development/Child care
		3	Exercise/Play
		4	Human rights/Right
		5	Misconduct/Deviation
		6	Social environment
		7	Cultural environment
		8	Physical environment
		9	Educational environment

Discipline: Biomolecular science

Item Number	Research Field	Screening Sub-panel Number / Keyword	
2501	Biomolecular chemistry	1	Natural product chemistry
		2	Secondary metabolite
		3	Searching bioactive molecules
		4	Chemical modification of biomolecules
		5	Biological function related substance
		6	Molecular mechanism of activity expression
		7	Biosynthesis
		8	Design and synthesis of bioactive molecule
		9	Combinatorial chemistry
		10	Chemical ecology
		11	Metabolome
2502	Chemical biology	1	In vivo functional expression
		2	Searching medicines
		3	Searching diagnosis chemicals
		4	Searching agricultural chemicals
		5	Chemical library
		6	Structure-activity relationship
		7	Chemical probes
		8	Molecular imaging
		9	Biomolecule measurements
		10	Intracellular chemical reactions
		11	Molecular targeting drugs
		12	Proteomics
		13	Directed evolution

Discipline: Brain sciences

Item Number	Research Field	Screening Sub-panel Number / Keyword		
2601	Basic / Social brain science	A	1	Genome brain science
			2	Epigenetics
			3	Brain molecule profiling
			4	Nano brain science
			5	Chemical biology
			6	Medicinal brain science
			7	Brain function probe
			8	Brain imaging
			9	Luminary brain science
			10	Neuron glial cross-interaction
			11	Brain function model animals
			12	Brain function behavioral analysis
			13	Brain and rhythm
			14	Sleep
			15	Neuropsychology/Linguistic science
			16	Neurological scinece
			17	Science of Dementia
		B	18	Communication
			19	Human interaction
			20	Social behavior
			21	Development and education
			22	Sensibility, affectivity and emotion
			23	Values, reward and punishment
			24	Motivation
			25	Neuroeconomics and neuromarketing
			26	Political brain science
2602	Brain biometrics		1	Brain morphology measurement
			2	Functional /Non-invasive biometry (measurement)
			3	Real time brain blood flow measurement
			4	Brain recordings
			5	Brain information reading (Decoding)
			6	Sensory information
			7	Kinetic (motor) information
			8	Cognitive information
			9	Higher brain function measurement
			10	Brain information processing
			11	Brain function operation
			12	Brain machine interface

Category: Humanities and Social Sciences

Area: Humanities/Social sciences

Discipline: Area studies

Item Number	Research Field	Screening Sub-panel Number	Keyword
2701	Area studies	1	Europe
		2	Russia/Slavic area
		3	North America
		4	Central and South America
		5	East Asia
		6	Southeast Asia
		7	South Asia
		8	West Asia/Central Asia
		9	Africa
		10	Oceania
		11	Global studies
		12	Cross-regional comparative studies
		13	Aid/Regional cooperation

Discipline: Gender

Item Number	Research Field	Screening Sub-panel Number	Keyword
2801	Gender	1	Gender differences/Gender roles
		2	Sexuality
		3	Social thought/Social movements/History
		4	Law/Politics
		5	Economy/Labor
		6	Social policy/Social welfare
		7	Body/Expression/Media
		8	Science and technology/Medicine/Life Science
		9	Education/Human development
		10	Development
		11	Violence/Prostitution
		12	Cross-cultural comparison
		13	Women's studies/Men's studies/Queer studies
		14	Career
		15	Gender equality
		16	Comparative analysis among nations

Area: Humanities

Discipline: Philosophy

Item Number	Research Field	Screening Sub-panel Number	Keyword
2901	Philosophy/ Ethics	1	Principles of philosophy/Specific theories of philosophy
		2	Principles of ethics/Specific theories of ethics
		3	Western philosophy
		4	Western ethics
		5	Japanese philosophy
		6	Japanese ethics
		7	Comparative philosophy
2902	Chinese philosophy/ Indian philosophy/ Buddhist studies	1	1 Chinese philosophy/Thought
			2 Chinese Buddhism
			3 Taoism
			4 Confucianism
		2	5 Indian philosophy/Thought
			6 Buddhist studies/History of Buddhism
2903	Religious studies	1	Religious studies in general
		2	History of religions
		3	Sociology of religion
		4	Philosophy of religion
		5	Comparative study of religion
2904	History of thought	1	History of Western thought
		2	History of Eastern and Japanese thought
		3	Comparative history of thought
		4	History of religious thought
		5	History of social thought
		6	History of political thought
		7	History of scientific thought
		8	History of art theory

Discipline: Art studies

Item Number	Research Field	Screening Sub-panel Number	Keyword
3001	Aesthetics and studies on art	1	Aethetics
		2	Philosophy and theory of art
		3	Musicology and music history
		4	Miscellaneous art studies
3002	Fine art history	1	Japanese and Eastern art history
		2	Western art history
		3	Comparative art history
		4	Iconology and religious art history
		5	Architecture history
		6	History of design, product design and clothing
3003	Art at large	1	Cultural representation studies
		2	Pop culture
		3	Film studies
		4	Performing arts
		5	Policy, arts management and creative industries
		6	Art practice, and musical and other performance
		7	Media arts

Discipline: Literature

Item Number	Research Field	Screening Sub-panel Number	Keyword
3101	Japanese literature	1	Japanese literature in general
		2	Ancient literature (Nara and Heian periods)
		3	Medieval literature (Kamakura and Muromachi periods)
		4	Premodern literature (Edo period)
		5	Modern and contemporary literature (after Meiji Restoration)
		6	Kanbungaku (Chinese literature in Japan)
		7	Bibliography and philology
		8	Literary theory, criticism, and comparative literature

（Discipline: Literature）

Item Number	Research Field	Screening Sub-panel Number		Keyword
3102	Literature in English		1	English literature
			2	American literature
			3	Other literatures in English
			4	Literary theory, criticism, bibliography and philology
			5	Comparative literature
3103	European literature		1	French and Francophone literature
			2	German literature
			3	Russian and East European literature
			4	Other European literature
			5	Western classics
			6	Literary theory, criticism, bibliography and philology
			7	Comparative literature
3104	Chinese literature		1	Chinese literature
			2	Bibliography and philology
			3	Literary theory and criticism
			4	Comparative literature
3105	Literature in general		1	Literary theory and criticism
			2	Comparative literature
			3	Literature in other languages and areas

Discipline: Linguistics

Item Number	Research Field	Screening Sub-panel Number		Keyword
3201	Linguistics	1	1	Phonetics
			2	Phonology
			3	Morphology
			4	Syntax
			5	Semantics
			6	Pragmatics
			7	Discourse analysis
			8	Scripts and orthography
			9	Lexicography
		2	10	Sociolinguistics
			11	Psycholinguistics
			12	Biolinguistics
			13	Historical linguistics
			14	French linguistics
			15	German linguistics
			16	Chinese linguistics
			17	Other languages
			18	Endangered and minority languages
			19	Neurolinguistics
			20	Corpus linguistics
3202	Japanese linguistics		1	Phonetics/Phonology
			2	Grammar
			3	Morphology, Semantics
			4	Writing systems
			5	Stylistics
			6	Dialect
			7	Language in daily life
			8	History of the Japanese language
			9	History of Japanese linguistics
3203	English linguistics		1	Phonetics/Phonology
			2	Grammar
			3	Morphology, Semantics
			4	Stylistics
			5	History of the English language
			6	History of English linguistics
			7	Diversity of the English language

（Discipline: Linguistics）

Item Number	Research Field	Screening Sub-panel Number		Keyword
3204	Japanese language education		1	Systems of Japanese language education/ Language policy
			2	Theories on qualified teachers/Classroom research
			3	Teaching methods/Curriculum planning
			4	Theory of second language acquisition
			5	Educational technology/Teaching materials/Educational media in general
			6	Mother tongue retention/Bilingual education
			7	Cross-cultural understanding and intercultural communication
			8	Japanese affairs
			9	History of Japanese language education
			10	Educational testing and evaluation
3205	Foreign language education	1	1	Teaching methods/Curriculum planning
			2	Educational technology/Teaching materials/Educational media in general
			3	e-Learning/Computer-assisted language learning
		2	4	Theory of second language acquisition
			5	Early foreign language education
		3	6	Foreign language education and language policies
			7	Theory and history of foreign language education
			8	Educational testing and evaluation
			9	Training foreign language teachers
			10	Intercultural communication, translation and interpretation

Discipline: History

Item Number	Research Field	Screening Sub-panel Number		Keyword
3301	Historical studies in general		1	World history
			2	History of cultural and diplomatic exchange
			3	Comparative history
			4	Comparative study of civilizations
			5	Globalization
			6	Environmental history
			7	History of islands and oceans
			8	Research in historical materials
3302	Japanese history		1	Ancient history (Nara and Heian periods)
			2	Medieval history (Kamakura and Muromachi periods)
			3	Early modern history (Edo period)
			4	Modern and contemporary history (after the Meiji Restoration)
			5	Local history
			6	Cultural history
			7	Religious history
			8	Environmental history
			9	History of disasters
			10	Urban history
			11	Rural history
			12	Japanese history in general
			13	History of cultural and diplomatic exchange
			14	Research in historical materials

(Discipline: History)

Item Number	Research Field	Screening Sub-panel Number	Keyword
3303	History of Asia and Africa	1	Chinese history (Ancient, medieval, and early modern periods)
		2	Chinese history (Modern and contemporary periods)
		3	East Asian history
		4	Southeast Asian history
		5	Oceanian history
		6	South Asian history
		7	West Asian/Islamic history
		8	Central Eurasian history
		9	African history
		10	Comparative history/History of cultural and diplomatic exchange
		11	Research in historical materials
3304	History of Europe and America	1	Ancient European history
		2	Medieval European history
		3	Modern and contemporary West European history
		4	Modern and contemporary East European history
		5	Modern and contemporary South European history
		6	Modern and contemporary North European history
		7	North and South American history
		8	Comparative history/History of cultural and diplomatic exchange
		9	Research in historical materials
3305	Archaeology	1	Archaeology in general
		2	Prehistoric studies
		3	Historical archaeology
		4	Japanese archaeology
		5	Asian archaeology
		6	Study of ancient civilizations
		7	Study of material culture
		8	Experimental archaeology
		9	Research in buried cultural assets
		10	Archaeological informatics

Discipline: Human geography

Item Number	Research Field	Screening Sub-panel Number	Keyword
3401	Human geography	1	History of geography/Methodology
		2	Economic geography/Transportation geography
		3	Political geography/Social geography
		4	Cultural geography
		5	Urban geography
		6	Rural geography
		7	Historical geography
		8	Regional environment/Natural hazards
		9	Geography education
		10	Regional planning/Regional policy
		11	Regional geography
		12	Geographic information system
		13	History of cartography

Discipline: Cultural anthropology

Item Number	Research Field	Screening Sub-panel Number	Keyword
3501	Cultural anthropology	1	Cultural anthropology
		2	Folklore
		3	Ethnography
		4	Social anthropology
		5	Comparative folklore
		6	Material culture
		7	Prehistoric period/Historic period
		8	Arts/Performing arts
		9	Religion/Rituals
		10	Development/Aid
		11	Health care
		12	Migration/Border crossing
		13	Minority
		14	Ecology/Natural environment
		15	Media
		16	Body/ Sport

Area: Social sciences

Discipline: law

Item Number	Research Field		Screening Sub-panel Number / Keyword
3601	Fundamental law	1	Legal philosophy/Legal theory
		2	Roman law
		3	Legal history
		4	Sociology of law
		5	Comparative law
		6	Foreign law
		7	Law and policy, Legislative studies
		8	Law and economics
3602	Public law	1	Constitutional law
		2	Administrative law
		3	Tax law
		4	Constitutional theory, History of constitution
		5	Constitutional litigation
		6	Comparative constitutional law, EU law
		7	Administrative organization law
		8	Administrative procedure
		9	Administrative remedies
		10	International tax law
3603	International law	1	Public international law
		2	Private international law
		3	International human rights, Nationality law
		4	Law of international organizations
		5	International economic law
		6	International civil procedure
		7	International trade law
3604	Social law	1	Labor law
		2	Economic law
		3	Social security law
		4	Education law
3605	Criminal law	1	Criminal law
		2	Criminal procedure
		3	Criminology
		4	Criminal justice policy
		5	Juvenile law
		6	Law and psychology
3606	Civil law	1	Civil law
		2	Commercial law
		3	Civil procedure
		4	Company law, Business corporate law
		5	Financial law
		6	Securities law
		7	Insurance law
		8	Insolvency law
		9	Alternative dispute resolution
		10	Civil execution law
3607	New fields of law	1	Environmental law
		2	Medical law
		3	Information law, Media law
		4	Intellectual property law
		5	Law and gender
		6	Law and education, Legal profession, Legal teaching
		7	Legal person, Trusts
		8	Consumer law
		9	Traffic law
		10	Land law, Housing law
		11	Judicial system

Discipline: Politics

Item Number	Research Field		Screening Sub-panel Number / Keyword
3701	Politics	1	Political theory
		2	Political methodology
		3	History of Western political thought
		4	History of Japanese and East Asian political thought
		5	Political history
		6	Japanese political history
		7	Japanese politics
		8	Political process
		9	Electoral studies
		10	New institutionalism
		11	Political economy
		12	Public administration
		13	Local government
		14	Comparative politics
		15	Public policy
3702	International relations	1	Theory of international relations
		2	Diplomatic history/International history
		3	Foreign policy
		4	International security
		5	Non-traditional security/ Human security
		6	International political economy
		7	International regime
		8	International integration
		9	International cooperation
		10	International communication
		11	Transnational relations
		12	Global issues
		13	International relations of East Asia
		14	International development cooperation

Discipline: Economics

Item Number	Research Field		Screening Sub-panel Number / Keyword
3801	Economic theory	1	Microeconomics
		2	Macroeconomics
		3	Economic theory
		4	Game theory
		5	Behavioral Economics
		6	Experimental Economics
		7	Evolutionary Economics
		8	Economic Institutions and Systems
3802	Economic doctrine/ Economic thought	1	Economic doctrine
		2	Economic thought
		3	Social thought
		4	Economic Philosophy
3803	Economic statistics	1	Statistical system
		2	Statistical research
		3	Population statistics
		4	Income/Wealth distribution
		5	National accounts
		6	Econometrics
		7	Financial Econometrics
3804	Economic policy	1	International economics
		2	Industrial organization
		3	Economic development
		4	Economic policy
		5	Urban economics
		6	Transportation economics
		7	Regional economics
		8	Environmental economics
		9	Resource economics
		10	Japanese economy
		11	Economic affairs

（Discipline: Economics）

Item Number	Research Field	Screening Sub-panel Number	Keyword
3805	Public finance/ Public economy	1	Public finance
		2	Local government finance
		3	Public economics
		4	Public policy
		5	Health economics
		6	Labor economics
		7	Social security
		8	Education economics
		9	Law and economics
		10	Political economics
3806	Money/ Finance	1	Monetary economics
		2	Finance
		3	International finance
		4	Corporate finance
		5	Insurance
		6	Financial engineering
3807	Economic history	1	Economic history
		2	Business history
		3	Industrial history

Discipline: Management

Item Number	Research Field	Screening Sub-panel Number	Keyword
3901	Management	1	Organizational management
		1	Managerial finance
		1	Management information
		1	Business administration
		1	Corporate social responsibility
		1	Management theory
		2	Corporate strategy
		2	International management
		2	Management of technology
		2	Business ventures
		2	Human resource management
3902	Commerce	1	Marketing
		2	Consumer behavior
		3	Advertising
		4	Distribution and logistics
		5	Marketing research
		6	Commerce
		7	Insurance
3903	Accounting	1	Financial accounting
		2	Managerial accounting
		3	Auditing
		4	Bookkeeping
		5	International accounting
		6	Tax accounting
		7	Governmental accounting
		8	Environmental accounting

Discipline: Sociology

Item Number	Research Field	Screening Sub-panel Number	Keyword
4001	Sociology	1	Social philosophy/Social thought
		1	History of sociology
		1	Sociological Theory / Sociological Methodology
		1	Social System
		1	Social research
		1	Mathematical sociology
		1	Social interaction/Social relations
		1	Social group/Social organization
		1	Institutions/Structure/Social change
		1	Knowledge/Science/Technology
		1	Politics/Power/State
		1	Class/Social status group /Social mobility
		2	Family/Kinship/Population
		2	Community/Village/City
		2	Industry/Labor
		2	Sociology of welfare
		2	Culture/Religion/Social consciousness
		2	Communication/Information/Media
		2	Gender
		2	Education/School
		2	Medical sociology /Disability studies
		2	Social problems/Social movements
		2	Discrimination/Social exclusion
		2	Environment/Pollution
		2	International community/Ethnicity
		2	Body/Sports
		2	Self/Identity
4002	Social welfare and social work studies	1	Principles of social welfare/philosophy of social welfare
		1	Social welfare history
		1	Social security / Social welfare policy
		1	Welfare state/ Welfare society
		1	Social work
		1	Poverty/ Public assistance
		1	Child welfare
		1	Women's welfare/ Feminist social work
		1	Social policy and social work with people with disabilites
		1	Social policy and social work with the elderly
		1	Social work with families
		1	Community work/ commumity services/community development
		1	Social work in mental health /social work in health care/ care work
		1	Forensic social work/ social work in juvenile delinquency and criminal justice
		1	Management in social work / Advocacy/evaluation
		1	International social work / NGOs in social welfare
		1	Volunteerism / NPOs in social welfare
		1	Social work education/ Field education

Discipline: Psychology

Item Number	Research Field		Screening Sub-panel Number / Keyword
4101	Social psychology	1	Self-processes
		2	Social cognition/Emotion
		3	Attitude/Belief
		4	Social interaction/Interpersonal relations
		5	Interpersonal communication
		6	Group/Leadership
		7	Collective behavior/Social phenomena
		8	Industry/Organization/Personnel
		9	Culture
		10	Social issues
		11	Environment/Environmental problems
		12	Media/Electronic network
		13	Consumer behavior
4102	Educational psychology	1	Development
		2	Parent-child relationship
		3	Developmental disorder
		4	Personality
		5	Teaching Method/Learning
		6	Educational assessment/evaluation
		7	Educational counseling
		8	Interpersonal relations/ behavior
		9	Self-process
		10	School,Class,Teacher
4103	Clinical psychology	1	Psychological disorder
		2	Crime/Delinquency
		3	Psychological assessment
		4	Psychotherapy
		5	Psychological intervention
		6	Nonverbal communication
		7	Counseling
		8	Psychological interviewing process
		9	Case study
		10	Self-help group
		11	Therapist's theory
		12	Community support
		13	Health psychology/Health development
		14	Rehabilitation psychology
4104	Experimental psychology	1	Psycho-physiology
		2	Sensation/Perception/Kansei
		3	Consciousness/Cognition/Attention
		4	Memory
		5	Affection/Emotion/Motivation
		6	Thinking/Reasoning/Language
		7	Learning/Behavior analysis
		8	Evolution/Development/Comparative cognition
		9	Principle/History/Methodology

Discipline: Education

Item Number	Research Field		Screening Sub-panel Number / Keyword
4201	Education	1	1 Philosophy of education
			2 Educational thought
			3 History of education
			4 Curriculum theory
			5 Instructional theory
			6 Academic achievement theory
			7 Educational methods
			8 Educational evaluation
			9 Teacher education
		2	10 Administration and finance of education
			11 School management
			12 School education
			13 Early childhood education/Child-care
			14 Lifelong learning
			15 Adult and community education
			16 Education at home
			17 Education policy

（Discipline: Education）

Item Number	Research Field		Screening Sub-panel Number / Keyword
4202	Sociology of education	1	Sociology of education
		2	Economics of education
		3	Anthropology of education
		4	Education policy
		5	Comparative education
		6	Human resource development/Development education
		7	School system/School culture
		8	Teacher/Student culture
		9	Youth problems
		10	Academic achievement problem
		11	Multicultural education
		12	Gender and education
		13	Education survey method
		14	Educational information system
4203	Education on school subjects and activities	1	1 Education of individual subjects (Japanese、mathematics、science、social studies、geography/History、civics、life environmental studies、music、art、home economics、technology、English、information)
			2 Education of vocational/Professional subject (industry、bussiness、agriculture、fishery、nursing、welfare)
		2	3 Curriculum composition/development
			4 Materials development
			5 Education excluding subject (global learning、moral、special activities)
			6 Guidance
			7 Career education
			8 Teacher training
4204	Special needs education		1 Education philosophy, Thought and History
			2 Education system, Policy, and Administration
			3 Psychological clinical study and Experiment study
			4 Assessment
			5 Instruction, Support, and Evaluation
			6 Support system and Special needs education coordinator
			7 Consultation and Counseling
			8 Family and advocacy
			9 Cohesive society and School inclusion
			10 Early detection and Early support
			11 Regular classroom and Resource room
			12 Special school for Children with disabilities
			13 Higher education and Career education
			14 Developmental disabilities and Emotional disturbance
			15 Intellectual disabilities
			16 Visual impairments, Deaf and Hard of hearing, and Speech and Language disorders
			17 Physical disorders and Health impairments
			18 Learning difficulties and School maladjustment
			19 Gifted and Talented

Category: Science and Engineering

Area: Interdisciplinary science and engineering

Discipline: Nano/Micro science

Item Number	Research Field	Screening Sub-panel Number	Keyword
4301	Nanostructural chemistry	1	Nanostructural chemistry
		2	Creation of nanostructures
		3	Clusters/Nanoparticles
		4	Fullerenes/Nanotubes/Graphene
		5	Mesoscopic Chemistry
		6	Hierarchical structures/Superstructures
		7	Nanosurfaces/Nanointerfaces
		8	Self-assembly
4302	Nanostructural physics	1	Nanotubes/Graphene
		2	Nanostructure properties
		3	Nanoscale control physics
		4	Nano/Micro physics
		5	Nanoprobes
		6	Quantum information
		7	Quantum effects
		8	Quantum dots
		9	Quantum devices
		10	Electron devices
		11	Spin devices
		12	Nanotribology
4303	Nanomaterials chemistry	1	Creation of nanomaterials
		2	Analysis and characterization of nanomaterials
		3	Nanosurfaces/Nanointerfaces
		4	Functional nanomaterials
		5	Formation/Control of nanostructures
		6	Molecular components
		7	Nanoparticles
		8	Fullerenes/Nanotubes/Graphene
		9	Carbon nanomaterials
		10	Single-molecule chemistry
		11	Nano-optical devices
		12	Molecular devices
4304	Nanomaterials engineering	1	Nano crystalline materials/Composites
		2	Nano particles/Wires/Sheets
		3	Nano dots/Layers
		4	Nano defect control
		5	Hetero/Homo structures
		6	Nano materials /Fabrication process
		7	Nano shaping/Forming process
		8	Nano carbon applications
		9	Nano and micro structural analysis /Evaluation/Testing
4305	Nanobioscience	1	DNA devices
		2	Nanosynthesis
		3	Molecular manipulation
		4	Biochips
		5	Single-molecule biochemistry and physiology
		6	Single-molecule bioinformation science
		7	Single-molecule science
		8	Single-molecule imaging/Nanometrology
		9	Genomic engineering
4306	Nano/ Microsystems	1	MEMS・NEMS
		2	Nano/Microfabrication
		3	Nano/Micro-optical devices
		4	Nano/Microchemical systems
		5	Nano/Microbiosystems
		6	Nano/Micromechanics
		7	Nano/Microsensors

Discipline: Applied physics

Item Number	Research Field	Screening Sub-panel Number	Keyword
4401	Applied materials	1	Magnetic material
		2	Superconductor
		3	Dielectric
		4	Optical properties
		5	Micro crystal
		6	Organic molecule
		7	Liquid crystal
		8	New functional materials
		9	Spintronics
		10	Organic/Molecular electronics
		11	Bioelectronics
4402	Crystal engineering	1	Metal
		2	Semiconductor
		3	Amorphous
		4	Crystallite
		5	Ceramics
		6	Crystal growth
		7	Epitaxial growth
		8	Crystal characterization
		9	Heterostructure
		10	Electronic/optical functionality
4403	Thin film/ Surface and interfacial physical properties	1	Ferroelectric thin film
		2	Carbon-related thin film
		3	Oxide electronics
		4	New functional thin film materials
		5	Surface
		6	Interface
		7	Vacuum
		8	Beam application
		9	Scanning probe microscopy
		10	Electron microscopy
4404	Optical engineering, Photon science	1	Optical elements/Instrumentation/Materials
		2	Quantum information processing
		3	Vision
		4	Quantum electronics
		5	Laser
		6	Nonlinear optics
		7	Quantum optics
		8	Photonic crystals
		9	Opto-electronics
		10	Micro-and nano-optics
		11	Optical sensing
		12	Optical recording
		13	Optical controlling
		14	Photo-processing
4405	Plasma electronics	1	Plasma
		2	Plasma processing
		3	Plasma application
		4	Reactive plasma
		5	Plasma chemistry
		6	Plasma treatment
		7	Plasma diagnostics

Area: Mathematical and physical sciences

（Discipline: Applied physics）

Item Number	Research Field	Screening Sub-panel Number	Keyword
4406	General applied physics	1	Mechanics
		2	Thermal engineering
		3	Sounds
		4	Vibration
		5	Electromagnetism
		6	Physical measurements and control
		7	Standards
		8	Sensors
		9	Energy conversion
		10	Radiation
		11	Accelerators

Discipline: Quantum beam science

Item Number	Research Field	Screening Sub-panel Number	Keyword
4501	Quantum beam science	1	Technology of accelerator
		2	Diagnostics for quantum beams
		3	Data processing and analysis
		4	Detectors
		5	Industrial application
		6	Medical application
		7	Compact quantum beam generator
		8	Lasers
		9	X-ray
		10	γ-ray
		11	Synchrotron radiation
		12	Neutron
		13	Muon
		14	Electron, Positron
		15	Neutrino
		16	Ion beam
		17	Proton beam
		18	Other quantum beam

Discipline: Computational science

Item Number	Research Field	Screening Sub-panel Number	Keyword
4601	Computational science	1	Mathematical engineering (mathematical analysis/planning/designing/optimization)
		2	Computational mechanics
		3	Numerical simulation
		4	Multi-scale modeling
		5	Large scale simulation
		6	Parallel Processing, 3D simulation
		7	Numerical simulation methods
		8	Advanced algorithms

Discipline: Mathematics

Item Number	Research Field	Screening Sub-panel Number		Keyword
4701	Algebra	1	1	Number theory
			2	Arithmetic geometry
			3	Group theory (including representation theory of groups)
			4	Algebraic combinatorics
		2	5	Algebraic geometry
			6	Ring theory (including Lie algebra theory, representaion theory of Lie algebras)
			7	Other algebra (including algebraic analysis, computational algebra, applications of algebra)
4702	Geometry	1	1	Riemannian geometry (including geometric analysis)
			2	Symplectic geometry (including contact geometry)
			3	Complex geometry
			4	Other differential geometry (including geometric structures, discrete geometry)
		2	5	Topology (algebraic topology, general topology)
			6	Differential topology (foliations, singularities, topological transformation groups)
			7	Low-dimensional topology (knot theory, 3-dimensional manifolds, 4-dimensional manifolds)
4703	Basic analysis	1	1	Functional analysis (including operator theory/representation theory)
			2	Operator algebras
			3	Dynamical systems/Integrable systems
			4	Algebraic analysis
		2	5	Real analysis
			6	Complex analysis
			7	Probability theory
			8	Other basic analysis (including function spaces/foundations of applied analysis)
4704	Mathematical analysis		1	Functional equations
			2	Applied analysis
			3	Nonlinear analysis (including variational analysis/nonlinear phenomena)
4705	Foundations of mathematics/ Applied mathematics		1	Mathematical logic and foundations, Information mathematics
			2	Discrete mathematics
			3	Numerical analysis/ Mathematical models (including prediction Theory, optimization, data analysis)
			4	Statistical mathematics (including game theory, design of experiments, convex programming problems, decision theory, estimation theory, testing theory,estimation of stochastic processes)
			5	Other applied mathematics

Discipline: Astronomy

Item Number	Research Field	Screening Sub-panel Number	Keyword
4801	Astronomy	1	Optical/Infrared astronomy
		2	Radio astronomy
		3	Solar physics
		4	Astrometry
		5	Theoretical astronomy
		6	X-ray/γ-ray astronomy

Discipline: Physics

Item Number	Research Field			Screening Sub-panel Number / Keyword
4901	Particle/ Nuclear/ Cosmic ray/ Astro physics	1	1	Particle physics (theory)
			2	Nuclear physics (theory)
			3	Cosmic ray physics (theory)
			4	Astrophysics (theory)
			5	Cosmology/Gravitation (theory)
		2	6	Particle physics (experiment)
			7	Nuclear physics (experiment)
			8	Cosmic ray physics (experiment)
			9	Astrophysics (experiment)
			10	Cosmology/Gravitation (experiment)
			11	Accelerator technology
			12	Particle detectors
4902	Condensed matter physics I		1	Semiconductors
			2	Mesoscopic system/Localization
			3	Optical properties
			4	Surface/Interface
			5	Crystal growth
			6	Dielectrics
			7	Lattice defects
			8	X-ray/Particle beam
			9	Phonon properties
			10	Spin properties(semiconductor)
4903	Condensed matter physics II	1	1	Magnetism
			2	Magnetic resonance
		2	3	Strongly-correlated system
			4	High temperature superconductivity
			5	Metal
			6	Ultralow temperature/Condensed quantum system
			7	Superconductivity/Density wave system
			8	Molecular solid/Organic conductor
4904	Mathematical physics/ Fundamental condensed matter physics		1	Statistical physics
			2	Fundamental condensed matter theory
			3	Mathematical physics
			4	Integrable system
			5	Non-equilibrium/Nonlinear physics
			6	Applied mathematics
			7	Dynamics
			8	Fluid physics
			9	Disordered system
			10	Computational physics
4905	Atomic/ Molecular/ Quantum electronics		1	Atom/Molecule
			2	Quantum electronics
			3	Quantum information
			4	Radiation
			5	Beam physics
4906	Biological physics/ Chemical physics/Soft matter physics		1	Physics of living phenomena
			2	Physics of biomolecules
			3	Mathematical biology
			4	Glass・Liquid・Solution
			5	Optical response・Photosynthesis・Chemical reaction
			6	Polymer・Liquid crystal・Gel
			7	Emulsion・Membrane・Colloid
			8	Interface・Wetting・Adhesion・Fracture
			9	Biophysics(general)
			10	Chemical physics(general)
			11	Soft matter physics(general)

Discipline: Earth and planetary science

Item Number	Research Field		Screening Sub-panel Number / Keyword
5001	Solid earth and planetary physics	1	Earthquake phenomena
		2	Volcanic phenomena
		3	Prediction of earthquakes and volcanic eruptions
		4	Earthquake and volcanic disasters
		5	Crustal movement/Sea floor crustal movement
		6	Geomagnetism
		7	Gravity
		8	Tectonics
		9	Internal structure
		10	Earth interior dynamics/Mineral physics
		11	Solid planets/Satellite/Asteroid
		12	Planet formation and evolution
		13	Exploration of solid planets
		14	Observation methods
5002	Meteorology/ Physical oceanography/ Hydrology	1	Meteorology
		2	Climatology
		3	Planetary atmospheres
		4	Air-sea interaction
		5	Geophysical fluid dynamics
		6	Physical oceanography
		7	Global environmental system
		8	Land-area water cycle/Material circulation
		9	Water budget
5003	Space and upper atmospheric physics	1	Terrestrial and planetary magnetospheres
		2	Geomagnetic variation
		3	Terrestrial and planetary ionospheres
		4	Terrestrial and planetary upper atmospheres
		5	Aurora/Magnetic storm
		6	Solar wind/Interplanetary space
		7	Solar-terrestrial system/Space weather
		8	Space plasma/Plasma wave
		9	Planetary plasma/Planetary atmosphere exploration
5004	Geology	1	Regional geology
		2	Marine geology
		3	Accretionary prism/Orogenic belt
		4	Structural geology/Tectonics
		5	Volcanoes/Active faults/Geologic hazards
		6	Environmental geology/Hydraulic geology
		7	Quaternary study
		8	Applied geology/Urban geology
		9	Sedimentology/Energy resource geology
		10	Earth history/Planetary geology
		11	Geoinformatics
		12	History of geoscience
5005	Stratigraphy/ Paleontology	1	Stratigraphic succession
		2	Fossil
		3	Phylogeny/Evolution/Diversity
		4	Function/Morphology
		5	Paleoecology
		6	Paleobiogeography
		7	Paleoenvironment
		8	Paleo-ocean
5006	Petrology/ Mineralogy/ Economic geology	1	Earth and planetary materials
		2	Earth and planetary evolution
		3	Crust/Mantle/Core
		4	Magma/Igneous rocks
		5	Metamorphic rocks
		6	Mineral physics
		7	Natural and artificial crystals
		8	Elemental fractionation
		9	Ore deposition
		10	Mineral resources
		11	Biologic and environmental minerals

Area: Chemistry

（Discipline: Earth and planetary science）

Item Number	Research Field		Screening Sub-panel Number / Keyword
5007	Geochemistry/ Cosmochemistry	1	Earth and extraterrestrial materials
		2	Material recycling
		3	Distribution of elements and molecules
		4	Isotope/Radiometric dating
		5	Cosmochemistry
		6	Chemistry of the crust and mantle
		7	Organic geochemistry
		8	Biosphere geochemistry
		9	Atmospheric and hydrospheric geochemistry
		10	Environmental/geo-environmental chemistry
		11	Analytical methods

Discipline: Plasma science

Item Number	Research Field		Screening Sub-panel Number / Keyword
5101	Plasma science	1	Basic plasma physics and electric discharges
		2	Space and astrophysical plasmas
		3	Burning plasma
		4	High energy density physics
		5	Complex plasmas
		6	Reactive plasmas
		7	Plasma chemistry
		8	Plasma applications
		9	Plasma diagnostics
		10	Plasma control /Laser
		11	Plasma acceleration
		12	Plasma application to beam physics
		13	Plasma application to mm and THz waves

Discipline: Basic chemistry

Item Number	Research Field		Screening Sub-panel Number / Keyword
5201	Physical chemistry	1	Structural chemistry
		2	Electronic state
		3	Molecular dynamics
		4	Chemical reaction
		5	Reaction dynamics
		6	Molecular spectroscopy
		7	Surface/Interface
		8	Solution
		9	Cluster
		10	Theoretical chemistry
		11	Biophysical chemistry
5202	Organic chemistry	1	Structural organic chemistry
		2	Organic reaction chemistry
		3	Synthetic organic chemistry
		4	Organoelement chemistry
		5	Organic photochemistry
		6	Physical organic chemistry
		7	Theoretical organic chemistry
5203	Inorganic chemistry	1	Metal complex chemistry
		2	Organometallic chemistry
		3	Inorganic solid-state chemistry
		4	Bioinorganic chemistry
		5	Nuclear/Radiochemistry
		6	Supramolecular complexes
		7	Multinuclear/Cluster complexes
		8	Coordination polymers
		9	Solution chemistry
		10	Nanomaterials
		11	Crystal structure
		12	Catalysts
		13	Element resources

Discipline: Applied chemistry

Item Number	Research Field		Screening Sub-panel Number / Keyword
5301	Functional solid state chemistry	1	Optical properties
		2	Electronic properties
		3	Electron spin
		4	Integrated properties
		5	Molecular devices
		6	Supramolecules
		7	Liquid crystals
		8	Crystals
		9	Thin films
		10	Surface/Interface
		11	Colloids/Quantum dots
		12	Electrochemistry
5302	Synthetic chemistry	1	Selective synthesis
		2	Complex/Organometallic catalysis
		3	Fine chemicals
		4	Asymmetric synthesis
		5	Catalyst design/reaction
		6	Environmentally benign synthesis
		7	Reaction field
		8	Automatic synthesis
		9	Biomimetic synthesis
		10	Combinatorial synthesis
		11	Organocatalyst
		12	Natural product synthesis
		13	Synthetic resources

（Discipline: Applied chemistry）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5303	Polymer chemistry	1	Polymer synthesis
		2	Polymer reaction/degradation
		3	Asymmetric polymerization
		4	Self-assembled polymers
		5	Polymer structure
		6	Polymer properties
		7	Functional polymers
		8	Bio-related polymers
		9	Polymer complex
		10	Polymer thin film/surface
		11	Polymerization catalyst
		12	Polymer resources
5304	Analytical chemistry	1	Sampling/Pretreatment
		2	Solvent/solid-phase extraction
		3	Instrumental analysis
		4	Spectrometric analysis
		5	Laser spectroscopy
		6	Mass spectrometry
		7	X-ray/electron spectroscopy
		8	Surface/particulate analysis
		9	Electrochemical analysis
		10	Chemical/bio sensor
		11	Separation analysis
		12	Chromatography
		13	Electrophoresis
		14	Flow analysis (FIA)
		15	Microchannel analysis
		16	Analytical reagent
		17	Environmental analysis
		18	Organic/polymer analysis
		19	Bioanalysis
5305	Bio-related chemistry	1	Nucleic acid chemistry
		2	Proteins and enzymes
		3	Sugar chemistry
		4	Natural products chemistry
		5	Bio-inorganic chemistry
		6	Bio-related chemistry
		7	Molecular recognition
		8	Bio-functional chemistry
		9	Biotechnology
		10	Biocatalysts
		11	Biofunctional materials
		12	Bio-structural chemistry
5306	Green/ Environmental chemistry	1	Environmental analysis
		2	Sensor/monitoring
		3	Pollutant evaluation
		4	Pollution indicator
		5	Environment assessment
		6	Environmental information chemistry
		7	Pollutant
		8	Decontamination material
		9	Environmental road-reducing substance
		10	Biodegradable substance
		11	Environmental restoration material
		12	Green chemistry
		13	Sustainable chemistry
		14	Recycle
		15	Element recovery
		16	Safety chemistry
		17	Resource analysis

（Discipline: Applied chemistry）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5307	Energy-related chemistry	1	Energy conversion
		2	Low-carbon Chemistry
		3	High-functional catalysts
		4	Photocatalysts
		5	Molecular devices and materials
		6	Energy resources
		7	Energy conservation chemistry

Discipline: Materials chemistry

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5401	Organic and hybrid materials	1	Liquid crystals
		2	Crystals
		3	Organic semiconductor materials
		4	Organic optical materials
		5	Organic/inorganic hybrid materials
		6	Molecular device materials
		7	Other functional materials
5402	Polymer/ Textile materials	1	Properties of polymer materials
		2	Synthesis of polymer materials
		3	Textiles
		4	Rubbers
		5	Gel
		6	Functional polymer materials
		7	Biopolymers
		8	Polymer alloy
		9	Polymer composites
		10	Polymer/Textile processing
5403	Inorganic industrial materials	1	Crystals
		2	Glass
		3	Ceramics
		4	Metals
		5	Layered/Intercalation compounds
		6	Ion exchangers
		7	Ionic conductors
		8	Photocatalysts
		9	High-functional catalysts
		10	Electrochemical materials
		11	Nanoparticle/Quantum dots
		12	Porous materials
5404	Device related chemistry	1	Semiconductor devices
		2	Electrical, magnetical and optical devices
		3	Biofunctional devices
		4	Batteries
		5	Molecular sensors

Area: Engineering

Discipline: Mechanical engineering

Item Number	Research Field		Screening Sub-panel Number / Keyword
5501	Materials/ Mechanics of materials	1	Material design/Process/Mechanical properties/Evaluation
		2	Continuum mechanics
		3	Structural mechanics
		4	Damage mechanics
		5	Fracture
		6	Fatigue
		7	Environments
		8	Reliability
		9	Biomechanics
		10	Nano/Micro material mechanics
		11	Bio material mechanics
5502	Production engineering/ Processing studies	1	Modeling for production
		2	Production Systems
		3	Production management
		4	Process design
		5	Machine tools
		6	Forming process
		7	Cutting/Grinding process
		8	Special processing
		9	Ultraprecision machining
		10	Nano/Micro machining
		11	Precise positioning/Measurements
5503	Design engineering/ Machine functional elements/ Tribology	1	Design engineering
		2	Shape modeling
		3	CAD･CAM･CAE
		4	Synectics
		5	Dynamics of mechanisms
		6	Machine elements
		7	Functional components
		8	Failure diagnostics
		9	Safety design
		10	Life cycle analysis and design
		11	Recycle design
		12	Tribology
		13	Nano/Micro tribology
5504	Fluid engineering	1	Computational fluid dynamics
		2	Flow measurements
		3	Compressible/Incompressible flow
		4	Turbulent flow
		5	Multi-phase flow
		6	Reacting flow
		7	Non-Newtonian flow
		8	Micro flow
		9	Molecular fluid dynamics
		10	Bio-fluid mechanics
		11	Environmental fluid mechanics
		12	Acoustics
		13	Fluid machinery
		14	Fluid power systems
5505	Thermal engineering	1	Thermophysical property
		2	Convection
		3	Heat conduction
		4	Thermal radiation
		5	Mass transfer
		6	Combustion
		7	Nano/Micro thermal engineering
		8	Thermal engine
		9	Refrigeration/Air conditioning
		10	Heat transfer equipment
		11	Energy engineering
		12	Bio thermal engineering

（Discipline: Mechanical engineering）

Item Number	Research Field		Screening Sub-panel Number / Keyword
5506	Dynamics/ Control	1	Dynamics
		2	Dynamic design
		3	Vibration mechanics
		4	Vibration analysis/tests
		5	Control instrument
		6	Motion control
		7	Vibration control
		8	Mechanical measurements
		9	Aseismic/Seismic isolation design
		10	Vehicle and transport system control
		11	Acoustic information/Acoustical control
		12	Acoustic energy
5507	Intelligent mechanics/ Mechanical systems	1	Robotics
		2	Mechatronics
		3	Nano/Micro mechatronics
		4	Biomechanics
		5	Softmechanics
		6	Information equipment/Intelligent (smart) machine systems
		7	Precision mechanics and systems
		8	Human-machine systems
		9	Information systems

Discipline: Electrical and electronic engineering

Item Number	Research Field		Screening Sub-panel Number / Keyword
5601	Power engineering/ Power conversion/ Electric machinery	1	Electrical energy engineering (generation/conversion/storage, and energy conservation)
		2	Power system engineering
		3	Electric machinery
		4	Power electronics
		5	Effective utilization of electric energy
		6	Electric/Electromagnetic compatibility
		7	Illumination/Lighting
5602	Electronic materials/ Electric materials	1	Electrical and electronic materials(semiconductor, dielectric,magnetic, ferro-dielectric,organic,insulator, superconductor,etc.）
		2	Thin film/Quantum structure
		3	Thick film
		4	Fabrication/Characterization method
5603	Electron device/ Electronic equipment	1	Electron device/Integrated circuits
		2	Circuit design/Computer aided circuit design (CAD)
		3	Optical devices and circuits
		4	Quantum devices/Spintronic devices
		5	Microwave/Millimeter wave/Terahertz wave
		6	Wave technology and applications
		7	Bio devices
		8	Information storage/record
		9	Display
		10	Sensing devices
		11	Micro fabrication process technology
		12	Interconnect,packaging and system integration
5604	Communication/ Network engineering	1	Electronic circuits and systems
		2	Nonlinear theory/circuits
		3	Information theory
		4	Signal processing
		5	Communication systems (wireless、wired、satellite、optical and mobile)
		6	Modulation/Demodulation
		7	Coding/Decoding
		8	Protocol
		9	Antennas
		10	Routing/Switching
		11	Networks/Local area networks (LAN)
		12	Multimedia
		13	Cryptography/Security

(Discipline: Electrical and electronic engineering)

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5605	Measurement engineering	1	Measurement technology
		2	Measuring/Analyzing instruments
		3	Measurement systems
		4	Signal processing
		5	Sensing information processing
5606	Control engineering/ System engineering	1	Control theory
		2	System theory
		3	Knowledge-based control
		4	Control technology
		5	Control systems
		6	Complex systems
		7	System information (knowledge) processing
		8	Social systems engineering
		9	Management systems engineering
		10	Environmental systems engineering
		11	Production systems engineering
		12	Biosystems engineering

Discipline: Civil engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5701	Civil engineering materials/ Construction/ Construction management	1	Concrete
		2	Steel
		3	Polymeric materials
		4	Composite material/New materials
		5	Timber
		6	Construction
		7	Pavement/Bituminous materials
		8	Maintenance/Management
		9	Construction business plan/Construction design
		10	Construction management
		11	Underground space
		12	Civil engineering informatics
5702	Structural engineering/ Earthquake engineering/ Maintenance management engineering	1	Applied mechanics
		2	Structural engineering
		3	Steel structure
		4	Concrete structure
		5	Hybrid structure
		6	Wind engineering
		7	Earthquake engineering
		8	Earthquake resistant structure
		9	Earthquake disaster prevention
		10	Maintenance engineering
5703	Geotechnical engineering	1	Soil mechanics
		2	Foundation engineering
		3	Rock engineering
		4	Engineering geology
		5	Ground behavior
		6	Ground and structure
		7	Geotechnical disaster prevention
		8	Geo-environmental engineering
		9	Tunnel engineering
5704	Hydraulic engineering	1	Hydraulics
		2	Environmental hydraulics
		3	Hydrology
		4	River engineering
		5	Water resources engineering
		6	Coastal engineering
		7	Port engineering
		8	Ocean engineering
5705	Civil engineering project/ Traffic engineering	1	Infrastructure planning
		2	Regional/Urban planning
		3	Nationwide spatial planning
		4	Disaster prevention planning/Environmental planning
		5	Transportation planning
		6	Traffic engineering
		7	Railway engineering
		8	Surveying/Remote sensing
		9	Landscape architecture/Design
		10	Infrastructure history

(Discipline: Civil engineering)

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5706	Civil and environmental engineering	1	Environmental planning and management
		2	Environmental systems
		3	Environmental conservation
		4	Water and wastewater systems
		5	Domestic and industrial wastes
		6	Soil and water environments
		7	Atmospheric circulation/Noise and vibration
		8	Ecological engineering

Discipline: Architecture and building engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5801	Building structures/ Materials	1	Load theory
		2	Structural analysis
		3	Structural design
		4	Concrete structure
		5	Steel structure
		6	Timber structure
		7	Composite structure
		8	Foundation
		9	Structural material
		10	Building construction method
		11	Maintenance technology
		12	Earthquake disaster prevention
		13	Structure control
		14	Earthquake resistant design
		15	Wind resistant design
5802	Architectural environment/ Equipment	1	Sound/Vibration environment
		2	Light environment
		3	Heat environment
		4	Air environment
		5	Environmental equipment planning
		6	Environmental psychology/physiology
		7	Building equipment
		8	Fire engineering
		9	Global/Urban environment
		10	Environment designing
5803	Town planning/ Architectural planning	1	Planning theory
		2	Design theory
		3	Housing theory
		4	Building types/District facilities
		5	Urban/Regional planning
		6	Administration/System
		7	Building/Urban economy
		8	Production management
		9	Disaster prevention planning
		10	Landscape/Environmental planning
5804	Architectural history/Design	1	Architectural history
		2	Urban history
		3	Architectural theory
		4	Design
		5	Style
		6	Landscape/Environment
		7	Preservation/Renovation

Discipline: Material engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword	
5901	Physical properties of metals/Metal-base materials	1	Electronic/Magnetic properties
		2	Mechanical/Thermal/Optical properties
		3	Properties of surfaces/Interfaces/Thin films
		4	Magnetic/Electronic/Information Materials
		5	Superconductors/Semiconductors
		6	Amorphous/Metallic glasses/Quasicrystals
		7	First principles calculations/Material design simulations
		8	Atomic/Electronic structural characterization
		9	Diffusion/Phase transformation/Phase diagrams

（Discipline: Material engineering）

Item Number	Research Field		Screening Sub-panel Number / Keyword
5902	Inorganic materials/ Physical properties	1	Crystal structure/Microstructure control
		2	Mechanical/Electronic/Electromagnetic/Optical /Thermeal properties
		3	Surface/Interface control
		4	Functional ceramics
		5	Functional glasses
		6	Structural ceramics
		7	Carbon materials
		8	Dielectric materials
		9	Inorganic material synthesis and process
5903	Composite materials/ Surface and interface engineering	1	Functional composites
		2	Structural composites
		3	Hybrid/Smart/Biomaterials
		4	Surface/Interface/Grain boundary control
		5	Plasma/Laser/Surface treatment and process
		6	Durability/Environmental degradation/Monitoring/Evaluation
		7	Bonding/Adhesion/Welding
		8	Recyclable bonding/Composites
		9	Design/Fabrication process/Forming
		10	Complex polymer
5904	Structural/ Functional materials	1	Strength/Fracture toughness
		2	Reliability
		3	Energy materials
		4	Fuel cell/Electric cell materials
		5	Sensor materials/Optical functional materials
		6	Biomaterials/Medical materials/Welfare materials
		7	Multifunctional materials
		8	Infrastructure materials
		9	Functional polymeric materials
5905	Material processing/ Microstructural control engineering	1	Plastic forming/Shaping
		2	Mechanical/Thermal treatments
		3	Precision/Non-conventional process
		4	Crystal structure/Microstructure control
		5	Electrochemical process
		6	Powder process/Powder metallurgy
		7	Thin film/Plating/Wiring process
		8	Electrocatalysis
5906	Metal making/ Resource production engineering	1	Reaction/Separation/Refining
		2	Melting/Solidification
		3	Casting
		4	Crystal growth/Fabrication
		5	Various manufacturing process
		6	Ecological materials/Energy saving process
		7	Process for scarce resource substitution/Ubiquitous materials
		8	Environmental purification/Low environmental burden/Sustainable materials
		9	Recycling/Recycling process/Reuse/Transduction
		10	Resource separation/Safeguard/Securing

Discipline: Process/Chemical engineering

Item Number	Research Field		Screening Sub-panel Number / Keyword
6001	Properties in chemical engineering process/ Transfer operation/ Unit operation	1	Equilibrium/Transport properties
		2	Fluid/Heat transfer/Mass transfer operation
		3	Distillation
		4	Extraction
		5	Absorption
		6	Adsorption
		7	Ion exchange
		8	Membrane separation
		9	Hetero-phase separation
		10	Ultra high separation
		11	Stirring/Blending operation
		12	Granular and powdered materials operation
		13	Crystallization procedure
		14	Thin film/Microparticle forming operation
		15	Polymer processing

（Discipline: Process/Chemical engineering）

Item Number	Research Field		Screening Sub-panel Number / Keyword
6002	Reaction engineering/ Process system	1	Gas/Liquid/Solid/Supercritical fluid operation
		2	Novel reaction field
		3	Reaction rate
		4	Reaction mechanism
		5	Reaction apparatus
		6	Materials synthesis process
		7	Polymerization process
		8	Measurement
		9	Sensors
		10	Process control
		11	Processing system design
		12	Process information processing
		13	Process operation/Facilities management
6003	Catalyst/ Resource chemical process	1	Catalysis reaction
		2	Catalyst preparation chemistry
		3	Catalyst performance analysis
		4	Energy conversion process
		5	Fossil fuel effective utilization technology
		6	Resources/Energy effective utilization technology
		7	Resources/Energy saving technology
		8	Combustion technology
6004	Biofunction/ Bioprocess	1	Biocatalyst engineering
		2	Biofunction engineering
		3	Food engineering
		4	Medicochemical engineering
		5	Bioproduction process
		6	Environmental Bioprocess
		7	Micro/Nano Bioprocess
		8	Applied bioelectrochemistry
		9	Bioreactor
		10	Biosensor
		11	Bioseparation
		12	Biorefinery
		13	Bioinformatics

Discipline:Integrated engineering

Item Number	Research Field		Screening Sub-panel Number / Keyword
6101	Aerospace engineering	1	Aerodynamics
		2	Structure/Material
		3	Vibration/Strength
		4	Guidance/Navigation/Control
		5	Propulsion/Engine
		6	Flight dynamics
		7	Aerospace system
		8	Design/Instrumentation
		9	Special aircraft
		10	Space utilization/Exploration
		11	Aerospace environment
6102	Naval and maritime engineering	1	Propulsion/Vessel dynamics
		2	Material/Structural mechanics
		3	Ship and marine hydrodynamics
		4	Planning/Design/Production system
		5	Shipbuilding/Equipment
		6	Maritime transportation system
		7	Marine engine/Fuel
		8	Marine environment
		9	Marine resources/Energy
		10	Ocean exploration/Equipment
		11	Undersea and subsea engineering
		12	Polar engineering
		13	Maritime systems

（Discipline:Integrated engineering）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
6103	Earth system and resources engineering	1	Applied geology
		2	Geo-engineering
		3	Remote sensing
		4	Monitoring in Geo-engineering
		5	Earth systems
		6	Resource exploration
		7	Natural resource development
		8	Resource evaluation
		9	Mineral processing
		10	Underground disposal and storage
		11	Contaminated soil remediation
		12	Development and utilization of deep underground
		13	Material resources
		14	Renewable source/Energy
		15	Economic resources
6104	Nuclear fusion studies	1	Core plasma
		2	Peripheral/divertor plasma
		3	Plasma measurement
		4	Fusion theory/simulation
		5	Plasma-wall interaction
		6	Plasma facing component/Plasma heating device
		7	Fuel/Blanket
		8	Low activation material
		9	Electromagnet
		10	Inertial confinement fusion
		11	Fusion systems engineering
		12	Safety/Biological influence/Social environment
6105	Nuclear engineering	1	Radiation engineering/Beam science
		2	Reactor physics/Nuclear data
		3	Nuclear measurements/Radiation physics
		4	Thermo-Hydrodynamics
		5	Structure
		6	System design/Safety engineering
		7	Nuclear material/Nuclear fuel
		8	Isotope/Radiation chemistry
		9	Fuel cycle
		10	Backend
		11	Advanced reactors
		12	Health physics/Environmental safety
		13	Social environment of nuclear energy
6106	Energy engineering	1	Energy generation/conversion
		2	Energy transport/storage
		3	Energy saving/Efficient use of energy
		4	Energy system
		5	Environmental harmony
		6	Natural energy use

Category: Biological Sciences

Area: Biological Sciences

Discipline: Neuroscience

Item Number	Research Field			Screening Sub-panel Number / Keyword
6201	Neurophysiology / General neuroscience		1	Molecular and cellular neuroscience
			2	Developmental and regenerative neuroscience
			3	Neuroendocrinology
			4	Clinical neuroscience
			5	Neuroinformatics
			6	Behavioral neuroscience
			7	Computational neuroscience
			8	(Nervous) System physiology
			9	Somatic, visceral or special sensation
6202	Nerve anatomy/ Neuropathology	A [Neuroanatomy]		
			1	Neural network
			2	Neurohistology
			3	Molecular neurobiology
			4	Neural fine structure
			5	Neurohistochemistry and neurocytochemistry
			6	Neural development and its abnormality
			7	Neural regeneration, remodeling and plasticity
			8	Experimental morphology of the nervous system
			9	Anatomical study of neuroimaging
			10	Neurocytology
		B [Neuropathology]		
			11	Cellular neuropathology
			12	Molecular neuropathology
			13	Neurodegenerative diseases
			14	Developmental or metabolic disorders
			15	Demented disorders
			16	Cerebrovascular disorders
			17	Brain tumors
			18	Spinal, peripheral nervous system or muscular disorders
6203	Neurochemistry/ Neuropharmacology		1	Molecular and cellular neurobiology
			2	Development, differentiation, and aging
			3	Neurotransmitters and receptors
			4	Intracellular signal transduction
			5	Glial cells
			6	Pathophysiology and therapy of neuropsychiatric diseases
			7	Stem cell biology, regeneration, and repair
			8	Neural plasticity
			9	Neuropharmacology
			10	Drug development
			11	Genomic neuroscience

Discipline:Laboratory animal science

Item Number	Research Field		Screening Sub-panel Number / Keyword
6301	Laboratory animal science	1	Environmental facilities
		2	Infectious diseases
		3	Cryopreservation
		4	Biosafety
		5	Disease models
		6	Breeding genetics
		7	Developmental engineering
		8	Laboratory animal welfare
		9	Animal experiment technology
		10	Bioresource for research
		11	Evaluation methods

Discipline: Oncology

Item Number	Research Field			Screening Sub-panel Number / Keyword
6401	Tumor biology	A	1	Genome instability
			2	Epigenetics
			3	Cancer genome analysis
			4	Carcinogenesis
			5	Inflammation and cancer
			6	Laboratory animal models
			7	Genetically-modified animals
			8	Oncogene
			9	Tumor suppressor gene
			10	Signal transduction
			11	DNA replication
			12	Cell cycle
			13	Cancer and heredity
			14	Apoptosis
			15	Cell polarity
			16	Cell adhesion and movement
			17	Invasion and metastasis
			18	Characteristics of cancer cells
			19	Cancer microenvironment
			20	Angiogenesis
			21	Lymphangiogenesis
			22	Stem cells
			23	Cellular senescence
			24	Cellular immortalization
		B	25	Epidemiologic study
			26	Biobank
			27	Interaction of gene and environment
			28	Prevention and intervention study
			29	Chemoprophylaxis
			30	Interface of cancer research and society
6402	Tumor diagnostics		1	Genome analysis
			2	Proteomics analysis
			3	Expression analysis
			4	Individuality diagnosis of cancer
			5	Order-made medical treatment
			6	Drug efficacy and calculation
			7	Biomarkers
			8	Tumor markers
			9	Molecule imaging
			10	Epigenome
			11	miRNA
			12	Functional RNA
6403	Tumor therapeutics		1	Antitumor substance research and chemical biology
			2	Chemotherapy
			3	Molecular target therapy
			4	Endocrine therapy
			5	Drug delivery
			6	Physical therapy
			7	Gene therapy
			8	Nucleic acid therapy
			9	Cell therapy
			10	Humoral immunity
			11	Cell immunity
			12	Antibody therapy
			13	Immunotherapy
			14	Vaccine therapy
			15	Adoptive immunotherapy
			16	Cytokine
			17	Immunosuppression
			18	Immune activation

Area: Biology

Discipline:Genome science

Item Number	Research Field	Screening Sub-panel Number / Keyword	
6501	Genome biology	1	Genome structural diversity
		2	Animal genome
		3	Plant genome
		4	Microbial genome
		5	Metagenome
		6	Organelle genome
		7	Genome evolution
		8	Genome architecture
		9	Genome maintenance and repair
		10	Expression of genome function
		11	Regulation of gene expression
		12	Transcriptome
		13	Proteome
		14	Metabolome
		15	Epigenome
		16	Comparative genome
		17	Biodiversity
6502	Medical genome science	1	Disease-associated gene
		2	Personalized medicine
		3	Gene diagnosis
		4	Human genome diversity
		5	Genome medicine
		6	Regenerative medicine
		7	Genome-wide association study
		8	Human genome resequencing
		9	Genome of model animals
		10	Disease epigenomics
		11	Human population genetics
		12	Statistical genetics
		13	Medical informatics
		14	Human and animal bacterial flora
6503	System genome science	1	Gene networks
		2	Protein networks
		3	Metabolic networks
		4	Development and differentiation
		5	Synthetic biology
		6	Database biology
		7	Biological databases
		8	Modeling and simulation
		9	Bioinformatics
		10	Genome analysis technology
		11	Functional RNA
		12	Epigenomic control
		13	Genome biotechnology
		14	Genetic resources

Discipline:Conservation of biological resources

Item Number	Research Field	Screening Sub-panel Number / Keyword	
6601	Conservation of biological resources	1	Conservation biology
		2	Biodiversity conservation
		3	Conservation of biological strains
		4	Conservation of genetic resources
		5	Ecosystem conservation
		6	Native species conservation
		7	Microbial culture collections
		8	Cell/Tissue/Seed Preservation

Discipline: Biological Science

Item Number	Research Field	Screening Sub-panel Number / Keyword	
6701	Molecular biology	1	Chromosomal organization,function and segregation
		2	Epigenetics
		3	Chromatin dynamics
		4	DNA replication
		5	DNA damage and repair
		6	Recombination
		7	Transcription and transcriptional regulation
		8	Post-transcriptional regulation
		9	RNA
		10	Translation
		11	Post-translational modification
		12	Super-molecular complex
6702	Structural biochemistry	1	Carbohydrate
		2	Lipid
		3	Nucleic acid
		4	Protein
		5	Enzyme
		6	Gene and chromosome
		7	Biological membrane and receptor
		8	Intercellular matrix
		9	Organelle
		10	Posttranslational modification
		11	Molecular recognition and interaction
		12	Denaturation and folding
		13	Structural analysis and prediction
		14	NMR
		15	Mass spectrometry
		16	X-ray crystallography
		17	High-resolution electron microscopy
6703	Functional biochemistry	1	Catalytic mechanism of enzyme
		2	Regulation of enzyme
		3	Gene expression and replication
		4	Biological energy transduction
		5	Metalloprotein
		6	Biological trace element
		7	Hormone and bioactive substances
		8	Cell signal transduction
		9	Membrane transport and transporters
		10	Proteolysis
		11	Cytoskeleton
		12	Immunobiochemistry
		13	Glycobiology
		14	Bioelectrochemistry
6704	Biophysics	1	Structures、dynamics and functions of proteins and nucleic acids
		2	Motility/Transport
		3	Biomembranes/Receptors/Channels
		4	Photobiology
		5	Cellular signaling and dynamics
		6	Neural information processing
		7	Theoretical biology/Bioinformatics
		8	Structural biology
		9	Folding
		10	Prediction of structure and function
		11	Single-molecule measurements and manipulation
		12	Bioimaging
		13	Non-equilibrium/Complex systems

（Discipline: Biological Science）

Item Number	Research Field	Screening Sub-panel Number	Keyword
6705	Cell biology	1	Cell structure and function
		2	Biomembrane
		3	Cytoskeleton/Cell motility
		4	Intracellular signaling
		5	Intercellular communication
		6	Cell cycle
		7	Cytokinesis
		8	Nuclear structure and function
		9	Cell-cell interaction/Extracellular matrix
		10	Protein degradation
		11	Chromatin
		12	Organella-genesis and dynamics
6706	Developmental biology	1	Cell differentiation
		2	Stem cells
		3	Germ layer formation and gastrulation
		4	Organogenesis
		5	Fertilization
		6	Germ cells
		7	Regulation of gene expression
		8	Developmental genetics
		9	Evolution and development

Discipline:Basic biology

Item Number	Research Field	Screening Sub-panel Number	Keyword
6801	Plant molecular biology/Plant physiology	1	Plastid function/Photosynthesis
		2	Phytohormones/Growth and development/Totipotency
		3	Organelles/Cell wall
		4	Response to environmental factors
		5	Plant-microbe interaction/Symbiosis
		6	Metabolism
		7	Plant molecular function
6802	Morphology/ Structure	1	Animal morphology
		2	Plant morphology
		3	Microorganisms and algae morphology
		4	Comparative endocrinology
		5	Molecular morphology
		6	Morphogenesis and simulation
		7	Tissue construction
		8	Microstructure
		9	Microscopic techniques and imaging
6803	Animal physiology/ Animal behavior	1	Metabolism
		2	Neurobiology
		3	Neuroethology
		4	Behavioral physiology
		5	Animal physiology and biochemistry
6804	Genetics/ Chromosome dynamics	1	Cytogenetics
		2	Population genetics
		3	Evolutionary genetics
		4	Human genetics
		5	Genetic diversity
		6	Developmental genetics
		7	Behavioral genetics
		8	Mutagenesis
		9	Chromosome rearrangement and maintenance
		10	Model organism development
		11	Transposon
		12	QTL analysis
		13	Epigenetics

（Discipline:Basic biology）

Item Number	Research Field	Screening Sub-panel Number	Keyword
6805	Evolutionary biology	1	Origin of life
		2	Origin of eukaryotic organisms
		3	Origin of organelles
		4	Origin of multicellularity
		5	Molecular evolution
		6	Morphological evolution
		7	Evolution of function
		8	Evolution of genes
		9	Evolutionary biology in general
		10	Comparative genomics
		11	Experimental evolutionary biology
6806	Biodiversity/ Systematics	1	Metabolism physiology
		2	Classification system
		3	Evolution
		4	Genetic diversity
		5	Population/Species diversity
		6	Community/Ecosystem diversity
		7	Taxonomic character
		8	Phylogenetics
		9	Speciation
		10	Natural history
		11	Museum
6807	Ecology/ Environment	1	Population
		2	Society
		3	Species interaction
		4	Assemblage
		5	Ecosystem
		6	Evolutionary ecology
		7	Behavioral ecology
		8	Natural environment
		9	Physiological ecology
		10	Molecular ecology
		11	Conservation ecology

Discipline:Anthropology

Item Number	Research Field	Screening Sub-panel Number	Keyword
6901	Physical anthropology	1	Morphology
		2	Prehistory/Chronology
		3	Biomechanism
		4	Molecular anthropology/Genetics
		5	Ecology
		6	Primates
		7	Evolution
		8	Growth/Aging
		9	Society
		10	Behavior/Cognition
		11	Reproduction/Development
		12	Bone archaeology
		13	Geographic diversity
6902	Applied anthropology	1	Physiological anthropology
		2	Ergonomics
		3	Physiological polymorphism
		4	Environmental adaptive capacity
		5	Systemic relationship
		6	Functional potential
		7	Techno-adaptability
		8	Somatometry
		9	Clothing
		10	Somatology/Adaptation
		11	Constitution/Health
		12	Forensic anthropology
		13	Medical anthropology

Area: Agricultural sciences

Discipline: Plant production and environmental agriculture

Item Number	Research Field		Screening Sub-panel Number / Keyword
7001	Science in genetics and breeding	1	Gene expression control/Epigenomics
		2	Gene regulatory network
		3	Omics analysis
		4	Transposon
		5	Organelle
		6	Growth/Developmental genetics
		7	Genome/Chromosome analysis
		8	Reproduction/Hybrid/Ploidy genetics
		9	Environmental stress
		10	Biotic stress
		11	Yield/Biomass
		12	Processing suitability/Quality improvement
		13	Genetic/Breeding resources/Biodiversity
		14	Genetic map/QTL analysis
		15	Gene introduction/mutagenesis
		16	Genome breeding/DNA marker-assisted selection
		17	Breeding theories/Bioinformatics
		18	Genetically engineered crop production/Assessment
7002	Crop production science	1	Food crops
		2	Industrial crops
		3	Forage and grassland crops
		4	Biofuel plants
		5	Resource plants
		6	Cultivation/Cropping system
		7	Farming system
		8	Crop quality/Palatability
		9	Weed science
		10	Weed control
		11	Allelochemicals
		12	Organic farming
		13	Environmentally friendly crop production
		14	Phytoremediation
		15	Management of uncultivated field
		16	Soil fertility management
		17	Stress responses
		18	Growth environment/Climatic variation
		19	Growth forecasting/Modeling
7003	Horticultural science	1	Fruit trees
		2	Vegetable crops
		3	Ornamental and landscape plants
		4	Plant production technology
		5	Transgenic and molecular biological technology
		6	Horticultural genomics and bioinformatics
		7	Pollination/Fertilization/Embryogenesis
		8	Fruit growth and ripening
		9	Plant growth failure and physiological disorders
		10	Plant growth regulators
		11	Plant pigments, aromatic compounds, and functional ingredients
		12	Environmental response and control
		13	Protected horticulture and plant factory
		14	Postharvest and processing technologies
		15	Stock and seed production, and plant propagation
		16	Plant hunting and plant genetic resources
		17	Biometrics and horticultural robotics
		18	Horticultural well-being and horticultural therapy

(Discipline: Plant production and environmental agriculture)

Item Number	Research Field		Screening Sub-panel Number / Keyword
7004	Plant protection science	1	Plant pathogens
		2	Nematode and parasitic higher plants
		3	Genome
		4	Phylogenetic systematics/Evolution
		5	Pathogenicity and virulence
		6	Resistance
		7	Disease occurrence
		8	Diagnosis of plant diseases
		9	Identification
	A	10	Disease control and treatment of disorder
	A	11	Infection・ecology・vectors
		12	Host specificity
		13	Plant pathological physiology
		14	Plant-microbe interactions
		15	Plant physiological diseases
		16	Postharvest diseases
		17	Breeding of tolerant crops
		18	RNA silencing
		19	Endophyte and mycorrhizal fungus/symbiotic bacteria
		20	Agricultural chemicals and biological control agents
		21	Drug and herbicide-resistance
		22	Disorder by agricultural chemicals
		23	Plant growth regulators and plant activators
		24	Natural bioactive substances
		25	Disease and insect pest management
		26	Mite and nematode management
		27	Weed management
		28	Introduced plants
		29	Allelopathy
		30	Integrated pest management
	B	31	Insect vectors
	B	32	Insect pest population
	B	33	Natural enemy
	B	34	Invasive insects and pathogens
	B	35	Insect taxonomy
	B	36	Occurrence forecast
	B	37	Management of birds and beasts
		38	Environmental stress responses / tolerance
		39	Plant growing environment
		40	Physical and cultural pest control
		41	Diseases- and insect pest-resistant crops
		42	Plant wound responses
		43	Insect–plant interactions

Discipline: Agricultural chemistry

Item Number	Research Field		Screening Sub-panel Number / Keyword
7101	Plant nutrition/ Soil science	1	Plant physiology, growth and development
		2	Plant nutrition and metabolism
		3	Plant metabolic regulation
		4	Plant molecular physiology
		5	Fertilizer
		6	Pedogenesis/Soil classification
		7	Soil physics
		8	Soil chemistry
		9	Soil organisms
		10	Soil environment
		11	Soil ecology
		12	Soil fertility
		13	Soil pollution control

（Discipline: Agricultural chemistry ）

Item Number	Research Field		Screening Sub-panel Number / Keyword
7102	Applied microbiology	1	Microbial classification
		2	Fermentative production
		3	Microbial physiology
		4	Microbial genetics/breeding
		5	Microbial enzyme
		6	Microbial metabolism
		7	Microbial function
		8	Microbial application
		9	Environmental microorganism
		10	Secondary metabolite production
		11	Microbial ecology
		12	Control of microbe
		13	Genetic resources
		14	Gene expression
		15	Metabolic engineering
		16	Environmental and cellular responses
		17	Microbial genomics
7103	Applied biochemistry	1	Animal biochemistry
		2	Plant biochemistry
		3	Enzyme application
		4	Genetic engineering
		5	Protein engineering
		6	Structural biology
		7	Bioengineering
		8	Metabolic engineering
		9	Enzyme chemistry
		10	Glycoscience / Lipid science
		11	Cell/Tissue culture
		12	Metabolism and physiology
		13	Gene expression
		14	Production of useful material
		15	Cellular response
		16	Signal transduction
		17	Trace element
7104	Biooragnic chemistry	1	Bioactive substance
		2	Regulator of cell function
		3	Pesticide science
		4	Plant growth substance
		5	Signal molecule
		6	Biosynthesis
		7	Natural products chemistry
		8	Chemical biology
		9	Physical chemistry
		10	Analytical chemistry
		11	Synthetic organic chemistry
		12	Bioregulatory chemistry
		13	Molecular recognition
		14	Structure-activity relationship
7105	Food science	1	Food chemistry
		2	Food biochemistry
		3	Food function
		4	Nutritional chemistry
		5	Nutritional biochemistry
		6	Molecular biology of nutrition
		7	Nutrigenomics
		8	Food physics
		9	Food analysis
		10	Food engineering
		11	Food manufacturing/processing
		12	Food storage
		13	Food safety

Discipline: Forest and forest products science

Item Number	Research Field		Screening Sub-panel Number / Keyword
7201	Forest science	1	Ecology/Biodiversity
		2	Genetics/Breeding
		3	Physiology
		4	Taxonomy
		5	Environment
		6	Silviculture
		7	Pathology/Microorganism
		8	Insect/Animal
		9	Planning/Management
		10	Policy/Economics
		11	Sustainable forestry
		12	Operational system/Road/Machinery
		13	Erosion control/Slope conservation and torrent disaster prevention/Revegetation
		14	Water resource/Hydrologic cycle
		15	Material circulation/Flux
		16	Climate change/Carbon balance
		17	Biomass
		18	Landscape ecology/Landscape design/Landscape management
		19	Environmental education/Forest education
7202	Wood science	1	Wood anatomy
		2	Wood formation/Physical properties
		3	Cellulose/Hemicellulose
		4	Lignin
		5	Extractives/Bioactive component
		6	Microbiology
		7	Mashroom/Wood rotting fungi
		8	Chemical processing/Adhesion
		9	Preservation/Wood culture
		10	Wood drying
		11	Machining
		12	Wood based material
		13	Strength/Wooden construction
		14	Habitability
		15	Forest product education
		16	Woody biomass
		17	Pulp and paper

Discipline: Applied aquatic science

Item Number	Research Field		Screening Sub-panel Number / Keyword	
7301	Aquatic bioproduction science	A	1	Aquatic environment
			2	Biological environment
			3	Environmental conservation
			4	Water/Sediment quality
			5	Ocean/Material cycle
			6	Seaweed beds/Tidal flats
			7	Restoration/Regeneration
			8	Environmental microbiology
			9	Plankton
			10	Nekton
			11	Benthos
			12	Red tide
			13	Environmental toxicology
			14	Aquatic ecosystem
			15	Global warming
			16	Biodiversity
			17	Remote sensing
		B	18	Taxonomy/Morphology
			19	Ecology/Ethology
			20	Bio-logging
			21	Resources/Resource management
			22	Fisheries
			23	Aquaculture
			24	Aquatic animals
			25	Aquatic plants
			26	Genetics/Heredity/Breeding
			27	Fish disease/Aquatic pathology
			28	Fisheries Engineering
			29	Fishing community/Fisheries Policy
			30	Fisheries Economics/Management/Marketing
			31	Fisheries education
			32	Fisheries Development
7302	Aquatic life science		1	Developmental biology
			2	Physiology
			3	Immunology/Biological defense
			4	Metabolism/Enzyme
			5	Fish nutrition
			6	Biochemistry
			7	Molecular biology
			8	Marine genomics
			9	Genetic resources
			10	Bioengineering
			11	Functional microbiology
			12	Glycobiology
			13	Chemical biology
			14	Biomimetics
			15	Bioactive substance
			16	Natural products chemistry
			17	Biopolymer
			18	Analytical chemistry
			19	Aquatic food chemistry
			20	Functional food
			21	Aquatic food processing/Preservation
			22	Food microbiology
			23	Food hygiene and sanitation
			24	Aquatic biotoxin
			25	Food safety
			26	Zero emission
			27	Aquatic biomass utilization
			28	Bioenergy

Discipline: Agricultural science in society and economy

Item Number	Research Field	Screening Sub-panel Number / Keyword	
7401	Agricultural science in management and economy	1	Food Self-Sufficiency and Food Security
		2	Food Economy
		3	Economy and Planning of Rural Community and Fishing Village
		4	Agriculture Related Industries
		5	Economy of Food, Agriculture and Environment
		6	Food Policy
		7	Policy for Agriculture, Forestry and Fishery
		8	International Food Economy and Trade
		9	Investment and Finance for Agriculture, Forestry and Fishery
		10	Distribution of Food and Agriculture and Fishery Products
		11	Food System
		12	Food Safety and Risk Management
		13	Management in Agriculture, Forestry and Fishery
		14	Assessment of Technology and Knowledge in Agriculture, Forestry and Fishery
		15	Management, Diagnosis and Evaluation on Business
		16	Land Utilization
		17	Value Added to Agricultural Product
		18	Marketing
		19	Management Ethics and CSR
		20	Cooperative Farming in Community
		21	Organizational Support to Agriculture, Forestry and Fishery
		22	Driving Force for Management
		23	Information System for Food and Agriculture
		24	Entry of Enterprise into Agriculture
		25	Agricultural Extension
7402	Agricultural science in rural society and development	1	Rural Society
		2	Rural Life
		3	Direct Linkage with Production and Consumption in Local Area
		4	Education for Food and Agriculture
		5	Leader in Rural Community and NPO
		6	Interaction between Urban and Rural Inhabitant
		7	Women Participation in Agriculture and Social Activities
		8	Society and Culture in Rural Community
		9	Multiple Functions in Agriculture and Rural Community
		10	Agricultural History and Comparison on Farming System
		11	Ideology and Ethics in Agriculture
		12	International Agriculture
		13	International Development for Rural Community and Fishing Village
		14	Project Management for Rural Development
		15	Extension and Transfer on Technology
		16	Dietary Transition
		17	Commons

Discipline: Agro-engineering

Item Number	Research Field			Screening Sub-panel Number / Keyword
7501	Rural environmental engineering/ Planning		1	Irrigation and drainage
			2	Reclamation and conservation of agricultural land
			3	Rural planning
			4	Rural environment
			5	Rural landscape and ecosystem
			6	Rural development and sustainability
			7	Material and energy cycle management
			8	Water resources
			9	Renewable Energy
			10	Rural governance
			11	Disaster prevention
			12	Soil environmental conservation
			13	Agricultural facilities and stock management
			14	Rural roads
			15	Rural sewerage
			16	International agriculture and rural development
			17	Hydraulics
			18	Hydrometeorology
			19	Water environment
			20	Soil physics
			21	Soil mechanics
			22	Applied mechanics
			23	Design and construction materials
7502	Agricultural environmental engineering/ Agricultural information engineering		1	Bioproduction system
			2	Bioproduction machinery
			3	Greenhouse horticulture/Plant factory
			4	Environment control in biology
			5	Bioprocessing
			6	Agricultural production environment
			7	Agricultural meteorology/Micrometeorology
		A	8	Meteorological disasters
			9	Global environment and global warming
			10	Environmental remediation and greening process
			11	Renewable energy
			12	Farming technology management
			13	Agricultural labour science
			14	Postharvest engineering
			15	Supply chain management
			16	Bioinstrumentation
			17	Cell measurement techniques
			18	Nondestructive measurement
			19	Imaging analysis
			20	Environmental stresses
			21	Biosensing
			22	Image information and image recognition
			23	Agribioinformatics
		B	24	Remote sensing
			25	Geographic information system
			26	Modeling/Simulation
			27	Computer network and ICT
			28	Agricultural robotics
			29	Precision agriculture
			30	Bioenvironmental information
			31	Agricultural information
			32	Farming information

Discipline: Animal life science

Item Number	Research Field			Screening Sub-panel Number / Keyword
7601	Animal production science		1	Breeding
			2	Reproduction
		A	3	Nutrition/Feeding
			4	Feed/Feedstuff
			5	Metabolism/Endocrine control
			6	Animal hygiene
			7	Animal management/Welfare
			8	Environment
			9	Facilities/Production system
			10	Grassland/Pasture
		B	11	Grazing
			12	Animal product
			13	Manure management
			14	Livestock biomass
			15	Livestock farming
			16	Marketing of livestock products
7602	Veterinary medical science		1	Pathology
			2	Pathophysiology
			3	Pharmacology
			4	Toxicology
		A	5	Pathogenic microorganism
			6	Zoonosis
			7	Parasitology
			8	Veterinary public health
			9	Epidemic prevention
			10	Epidemiology
			11	Internal medicine
			12	Surgery
			13	Veterinary reproduction/Obstetrics
			14	Diagnostics/Laboratory examination
		B	15	Clinical pathology
			16	Therapy/Nursing
			17	Disease prevention and control
			18	Anesthesia/Analgetics
			19	Radiology
			20	Animal welfare/Ethics
7603	Integrative animal science		1	Physiology
			2	Histology
			3	Anatomy
			4	Endocrinology
			5	Cellular function
			6	Immunology
			7	Host defense
		A	8	Genetics
			9	Epigenetics
			10	Genome
			11	Development/Differentiation
			12	Bioinformatics
			13	Ecology
			14	Ethology
			15	Psychology
			16	Genetic engineering
			17	Cellular engineering
			18	Developmental biotechnology
			19	Stem cell
			20	Regenerative therapy
			21	Imaging
		B	22	Wildlife
			23	Experimental animal
			24	Animal models of disease
			25	Companion animal
			26	Animal-assisted therapy
			27	Bioresource
			28	Biodiversity

Discipline: Boundary agriculture

Item Number	Research Field			Screening Sub-panel Number / Keyword
7701	Insect science		1	Insect technology and biomaterial production
			2	Sericulture, silk
			3	Insect pathology
			4	Entomopathogenic microbes and viruses
			5	Insect ecology
			6	Insect physiology and biochemistry
			7	Insect molecular biology
			8	Insect behavior
			9	Insect population, community
			10	Insect evolution and systematics
			11	Insect genetics and genomics
			12	Insect development and reproduction
			13	Life history, seasonal adaptation
			14	Chemical ecology
			15	Chemical and physical communications
			16	Symbiosis, parasitism
			17	Spiders, mites, nematodes
			18	Apiculture
			19	Pollination
			20	Social insects
			21	Insect mimetics
7702	Environmental agriculture (including landscape science)	A	1	Biomass
			2	Biological environment
			3	Genetic resource
			4	Biodiversity
			5	Environmental analysis
			6	Environmental remediation
			7	Environmental purification
			8	Aquatic pollution
			9	Environmental adaptability
			10	Ecosystem services
			11	Resources-Environment balance
			12	Resource recycling systems
			13	Environmental value-assessment
			14	Low-carbon society
			15	LCA
			16	Environmentally friendly agriculture
			17	Watershed management
			18	Integrated agriculture and fisheries
			19	Regional agriculture
		B	20	Landscape design
			21	Landscape architecture
			22	Open space planning
			23	Landscape formation/Landscape conservation
			24	Cultural landscape
			25	Nature conservation/Nature restoration
			26	Urban environmental design
			27	Natural environmental assessment
			28	Biotope
			29	Public interest functions of ecosystem
			30	Landscape ecology
			31	Urban farmland
			32	Open space management
			33	Urban park/Disaster prevention park
			34	National park
			35	Planting engineering
			36	Urban green plant
			37	Tourism/Green-tourism, recreation
			38	Participatory town planning
			39	Social and environmental contribution green

Item Number	Research Field		Screening Sub-panel Number / Keyword
7703	Applied molecular and cellular biology	1	Cell biology
		2	Chromosome engineering
		3	Glycosylation engineering
		4	Organelle engineering
		5	Cell / Tissue engineering
		6	Epigenetics
		7	Gene expression
		8	Development/Differentiation control
		9	Cell-cell interaction
		10	Intermolecular interaction
		11	Biological interaction
		12	Biosensor
		13	Cellular function
		14	Molecular imformation
		15	Functional-molecule design
		16	Proteomics
		17	Metabolomics
		18	Production of useful material
		19	Culture engineering
		20	Biologics

Area: Medicine, dentistry, and pharmacy

Discipline: Pharmacy

Item Number	Research Field	Screening Sub-panel Number / Keyword	
7801	Chemical pharmacy	1	Organic chemistry
		2	Synthetic organic chemistry
		3	Biomolecules
		4	Natural products chemistry
		5	Mechanistic organic chemistry
		6	Heterocyclic chemistry
		7	Asymmetric synthesis
7802	Physical pharmacy	1	Physical chemistry
		2	Analytical chemistry
		3	Galenical pharmacy
		4	Biophysical chemistry
		5	Isotope pharmacentical chemistry
		6	Biocomplex chemistry
		7	Molecular structure science
		8	Structural biology
		9	Imaging
		10	Drug delivery
		11	Information science
7803	Biological pharmacy	1	Biochemistry
		2	Molecular biology
		3	Immunology
		4	Cell biology
		5	Developmental biology
		6	Functional genomics
		7	Physiological chemistry
		8	Endocrinology
7804	Pharmacology in pharmacy	1	Pharmacology
		2	Analytical pharmacology
		3	Neurobiology
		4	Drug therapeutics
		5	Cellular signal transduction
		6	Toxicology and drug safety
		7	Systems pharmacology
		8	Pharmacogenomics
7805	Natural medicines	1	Pharmacognosy
		2	Medicinal resources
		3	Natural medicines
		4	Traditional Chinese-Japanese medicines
		5	Ethnomedicines
		6	Biosynthesis
		7	Antibiotics and microbial medicines
		8	Bioactive natural compounds
		9	Medicinal foods
7806	Drug development chemistry	1	Medicinal chemistry
		2	Medicinal molecular design
		3	Lead discovery
		4	Functional science of medicinal molecules
		5	Genomic drug development
		6	Regulatory science
		7	Chemical biology
		8	Biopharmaceutical
7807	Environmental and hygienic pharmacy	1	Environmental hygiene
		2	Environmental chemistry
		3	Environmental dynamics
		4	Food hygienics
		5	Chemical nutrition
		6	Microbiology and infectious diseases
		7	Toxicology
		8	Environmental toxicology
		9	Cosmetic and fragrance science
		10	Hygienic tests

（Discipline: Pharmacy）

Item Number	Research Field		Screening Sub-panel Number / Keyword	
7808	Medical pharmacy	1	1	Pharmacokinetics
			2	Drug metabolism
			3	Transporter
			4	Screening system for pharmacokinetics and metabolism
			5	Prediction system for human pharmacokinetics and metabolism
			6	Clinical chemistry
			7	Personalized medicine
		2	8	Clinical pharmaceutical sciences
			9	Medical pharmaceutics
			10	Drug information and clinical toxicology
			11	Drug economics
			12	Social pharmacy
			13	Hospital pharmacy and pharmacy administration
			14	Clinical pharmacy education

Discipline: Basic medicine

Item Number	Research Field		Screening Sub-panel Number / Keyword	
7901	General anatomy (including histology/ embryology)	1	1	Gross anatomy
			2	Functional anatomy
			3	Clinical anatomy
			4	Comparative anatomy
			5	Radiological anatomy
			6	Morphogenesis and embryogenesis
			7	Teratology
			8	Experimental morphology
			9	Anatomical education
		2	10	Cytology
			11	Histology
			12	Cell differentiation and tissue formation
			13	Cell function and morphology
			14	Ultrastructural morphology
			15	Molecular morphology
			16	Histocytochemistry
			17	Microscopic technology
7902	General physiology		1	Molecular and cellular physiology
			2	Biological membrane, channel, transporter and active transport
			3	Receptor and intracellular signal transduction
			4	Stimulation-secretion coupling
			5	Epithelial function
			6	Heredity, fertilization, development and differentiation
			7	Cellular proliferation and cell death
			8	Cellular motility, morphogenesis and intercellular interaction
			9	Microcirculation, peripheral circulation, circulation dynamics and regulation
			10	Ventilation mechanics, blood gas function and respiratory control
			11	Gastrointestinal motility, absorption and digestion
			12	Renal function, body fluids, and acid-base balance
			13	Blood coagulation and rheology
			14	Pathophysiology
			15	System physiology and physiome
			16	Comparative, developmental and genome physiology
			17	Muscular physiology

(Discipline: Basic medicine)

Item Number	Research Field	Screening Sub-panel Number		Keyword
7903	Environmental physiology (including physical medicine and nutritional physiology)		1	Environmental physiology
			2	Physical medicine
			3	Nutritional physiology
			4	Adaptive and associative physiology
			5	Biorhythm
			6	Growth, development, and aging
			7	Stress
			8	Space medicine
			9	Behavioral physiology
			10	Biological clock
			11	Hyperthermia physiology
			12	Feeding regulation
			13	Sleep and arousal
			14	Reproductive physiology
7904	General pharmacology		1	Kidney
			2	Smooth muscle and skeletal muscle
			3	Gastrointestinal
			4	Inflammation and immunity
			5	Bioactive substance
			6	Central nervous system and peripheral nerve
			7	Spinal cord and pain
			8	Receptor, channel, transport system, and signal transduction system
			9	Cardiovascular system and hematology
			10	Drug discovery and pharmacogenomics
			11	Drug therapy and toxicology
			12	Herbal medicine and pharmacology of natural products
7905	General medical chemistry		1	Biomolecular medicine
			2	Cellular biochemistry (cellular medical chemistry)
			3	Genomic biochemistry (genomic medical chemistry)
			4	Developmental medicine
			5	Regenerative medicine
			6	Aging medicine
			7	Higher order life sciences
			8	Intracellular signaling
7906	Pathological medical chemistry		1	Abnormal metabolism
			2	Molecular pathogenesis
			3	Molecular and gene diagnosis
			4	Molecular oncology
			5	Molecular pathogenesis of nutrition
7907	Human genetics		1	Medical genome science
			2	Molecular genetics
			3	Cytogenetics
			4	Genetic biochemistry
			5	Genetic epidemiology
			6	Genetic diagnostics
			7	Gene therapy
			8	Social genetics
			9	Epigenetics
7908	Human pathology	1	1	Digestive system and salivary gland
			2	Urogenital and endocrine organs
		2	3	Brain and nervous system
			4	Respiratory and mediastinal organs
			5	Cardiovascular system
			6	Bone, joint, muscle, skin and sense organs
			7	Blood
		3	8	Diagnostic pathology
			9	Diagnostic cytopathology
			10	Diagnostic molecular pathology
			11	Diagnostic immunopathology
			12	Environmental pathology
			13	Transplantation pathology

(Discipline: Basic medicine)

Item Number	Research Field	Screening Sub-panel Number		Keyword
7909	Experimental pathology	1	1	Cell injury
			2	Tumors
			3	Genetic disorders
			4	Environmental diseases
			5	Regenerative medicine
		2	6	Inflammation
			7	Hemodynamic disorders
			8	Immune diseases
			9	Infectious diseases
			10	Metabolic diseases
			11	Pediatric pathology
			12	Animal models
7910	Parasitology (including sanitary zoology)		1	Helminth
			2	Protozoa
			3	Arthropod vector
			4	Pathogenic animals
			5	International health
			6	Molecules and cells
			7	Development and genetics
			8	Epidemiology
			9	Diagnosis and treatment
			10	Prevention and control
7911	Bacteriology (including mycology)		1	Genomes and genetics
			2	Structure and physiology
			3	Classification
			4	Pathogenicity
			5	Toxins and effectors
			6	Drug resistance
			7	Epidemiology
			8	Diagnosis and treatment
			9	Prevention and control
7912	Virology		1	Molecules and structure
			2	Cells and replication
			3	Organisms and pathogenicity
			4	Epidemiology
			5	Diagnosis and treatment
			6	Prevention and control
			7	Prions
7913	Immunology		1	Cytokines
			2	Signal transduction
			3	Antibodies and complements
			4	Innate immunity
			5	Acquired immunity
			6	Mucosal immunity
			7	Immunological memory
			8	Immune tolerance and autoimmunity
			9	Immune surveillance and tumor immunology
			10	Immunodeficiency
			11	Allergy and immune-related disorder
			12	Infection immunity
			13	Inflammation
			14	Immunoregulation and transplantation immunology

Discipline: Boundary medicine

Item Number	Research Field	Screening Sub-panel Number		Keyword
8001	Medical sociology		1	Bioethics
			2	Medical, Dental and Pharmaceutical Education
			3	Medical history
			4	Health economics
			5	Medical behavioral science

（Discipline: Boundary medicine）

Item Number	Research Field	Screening Sub-panel Number	Keyword
8002	Applied pharmacology	1	Clinical pharmacology
		2	Clinical trials and ethics
		3	Pharmaceutical therapeutics
		4	Adverse drug reaction and drug interaction
		5	Drug transport mechanism
		6	Pharmacogenomics
		7	Clinical isotope pharmacy
		8	Medical devices and pharmacy
		9	Drug metabolic enzyme and tranporter
		10	Imaging
		11	Research using human tissue
		12	Drug dependence and drug sensitivity
		13	Genetic diagnosis and gene therapy
		14	Drug delivery
		15	Pharmacoepidemiology
8003	Laboratory medicine	1	Clinical laboratory medicine
		2	Clinical pathology
		3	Clinical chemistry
		4	Immunology and serology
		5	Clinical laboratory system
		6	Genetic testing
		7	Clinical microbiology
		8	Laboratory oncology
		9	Clinical hematology
		10	Physiological laboratory testing
8004	Pain science	1	Evaluation methods of pain
		2	Epidemiology of pain
		3	Analgesic
		4	Non-drug therapy
		5	Pain producing substance (PPS), Algesic substance
		6	Generating or exacerbating mechanism of pain
		7	Neural mechanism of pain
		8	Hyperalgesia
		9	Genetic factors of pain
		10	Development or aging factors of pain
		11	Gender difference in pain
		12	Pain withdrawal reflex
		13	Numbness, Hypesthesia
		14	Nociceptor
		15	Histopathic pain, Histotoxic pain
		16	Neuropathic pain, Neuralgia
		17	Psychological pain
		18	Itching, pruritus
		19	Epidemiology of itching, or pruritus
		20	Antipruritics
		21	Itch-producing substances
		22	Generating or exacerbating mechanism of pruritus
		23	Neural mechanism of pruritus
		24	Curettage behavior
		25	Hyperknesis
		26	Psychological itching
		27	Development or aging factors of itching

Discipline: Society medicine

Item Number	Research Field	Screening Sub-panel Number	Keyword
8101	Epidemiology and preventive medicine	1	Epidemiology
		2	Clinical epidemiology
		3	Clinical trial
		4	Clinical statistics
		5	Environmental epidemiology
		6	Molecular epidemiology
		7	Preventive medicine
		8	Medical examination
		9	Screening
		10	Mass-screening
		11	Health management
		12	Health promotion

（Discipline: Society medicine）

Item Number	Research Field	Screening Sub-panel Number	Keyword
8102	Hygiene and public health	1	Environmental health
		2	Occupational health
		3	Food sanitation
		4	Community health
		5	Community medicine
		6	Maternal and child health
		7	Adult health
		8	Elderly health
		9	Global Health
		10	Health administration
		11	Health policy
		12	Care and welfare
8103	Medical and hospital management	1	Hospital management
		2	Medical administration
		3	Medical informatics
		4	Quality of medical care
		5	Medical record management
		6	Risk management
		7	Nosocomial infection management
		8	Critical path
8104	Legal medicine	1	Forensics
		2	Forensic examination
		3	Alcohol research
		4	Forensic odontology
		5	DNA polymorphism
		6	Forensic pathology

Discipline: Clinical internal medicine

Item Number	Research Field	Screening Sub-panel Number		Keyword
8201	General internal medicine (including psychosomatic medicine)		1	Psychosomatic internal medicine
			2	Stress science
			3	Oriental medicine
			4	Alternative medicine
			5	Palliative medicine
			6	General medicine
			7	Primary care
			8	Geriatrics
8202	Gastroenterology	1	1	Upper gastroenterology (esophagus, stomach, duodenum)
		2	2	Lower gastroenterology (small intestine, colon)
		3	3	Hepatology
		4	4	Biliary-Pancreatology
		5	5	Digestive endoscopy
8203	Cardiovascular medicine	1	1	Clinical Cardiology
		2	2	Clinical Angiology
		3	3	Molecular Cardiology
		4	4	Molecular Angiology
8204	Respiratory organ internal medicine	1	1	Clinical respirology
		2	2	Molecular and cellular respirology
8205	Kidney internal medicine	1	1	Nephrology
		2	2	Hypertension
			3	Water and electrolyte metabolism
			4	Hemodialysis
8206	Neurology	1	1	Molecular pathophysiology
			2	Neuroimmunology
			3	Clinical molecular neurogenetics
		2	4	Clinical neurophysiology
			5	Clinical neuromorphology
			6	Clinical neuropsychology
			7	Functional neuroimaging
8207	Metabolomics	1	1	Disturbances of energy and carbohydrate metabolism
			2	Metabolic syndrome
		2	3	Abnormal lipid metabolism
			4	Disorder of purine metabolism
			5	Abnormal bone and calcium metabolism
			6	Metabolic electrolyte abnormality
8208	Endocrinology		1	Endocrinology
			2	Reproductive endocrinology

（Discipline: Clinical internal medicine）

Item Number	Research Field	Screening Sub-panel Number / Keyword		
8209	Hematology	1	1	Hematology
			2	Hematology/Oncology
		2	3	Thrombosis/Hematostasis
			4	Transfusion medicine
			5	Hematopoietic stem cell transplantation
			6	Hematology/Immunology
			7	Immune regulation
8210	Collagenous pathology/ Allergology	1	1	Connective tissue diseases
			2	Rheumatology
		2	3	Allergology
			4	Clinical immunology
			5	Inflammation
8211	Infectious disease medicine		1	Infection diagnosis
			2	Infection therapy
			3	Infection prevention
			4	International infection science
			5	Infection epidemiology
			6	Opportunistic infection
8212	Pediatrics	1	1	Developmental pediatrics
			2	Growth and developmental medicine
			3	Pediatric neurology
			4	Pediatric endocrinology
			5	Pediatric metabolism/Nutrition
			6	Hereditary/Teratology
			7	Pediatric health
			8	Pediatric social medicine
		2	9	Pediatric hematology
			10	Pediatric oncology
			11	Pediatric immunology/Allergy/Connective tissue diseases
			12	Pediatric infectious disease
		3	13	Pediatric cardiology
			14	Pediatric respirology
			15	Pediatric nephrology/Urology
			16	Pediatric gastroenterology
8213	Embryonic/ Neonatal medicine		1	Prenatal diagnosis
			2	Fetal medicine
			3	Teratology
			4	Neonatal medicine
			5	Premature baby medicine
8214	Dermatology	1	1	Skin diagnostics
			2	Mechanisms of skin diseases
			3	Cutaneous physiology and biology
			4	Laser/photobiology
		2	5	Dermatologic oncology
			6	Pigment cell biology
			7	Cutaneous immunology and inflammation
			8	Infectious diseases
			9	Regenerative dermatology
			10	Skin genetics
8215	Psychiatric science	1	1	Psychopharmacology
			2	Clinical molecular genetics
		2	3	Psychophysiology
			4	Psychopathology
			5	Social psychiatry
			6	Child and adolescence psychiatry
			7	Geriatric psychiatry
			8	Forensic psychiatry
			9	Neuropsychology
			10	Liaison psychiatry
			11	Psychiatric rehabilitation

（Discipline: Clinical internal medicine）

Item Number	Research Field	Screening Sub-panel Number / Keyword		
8216	Radiation science	1	1	Medical imaging (including diagnostic radiology)
			2	X-Ray/CT
			3	Magnetic resonance imaging
			4	Nuclear medicine (including PET)
			5	Ultrasonography
		2	6	Radiopharmaceuticals/Contrast medium
			7	Radiation protection and safety management
			8	Medical imaging technology
			9	Interventional radiology
			10	Angioplasty/Osteoplasty/Vascular embolization
			11	Radiofrequency ablation（RFA）/Stent treatment/Reserver treatment
			12	Hyperthermia
			13	Ultrasound therapy
			14	Radiation emergency medicine
			15	Medical radiation biology
		3	16	Therapeutic radiology
			17	Radiation oncology
			18	Radiotherapy physics
			19	Radiotherapy biology
			20	Particle beam therapy
			21	Radiation technology

Discipline: Clinical surgery

Item Number	Research Field	Screening Sub-panel Number / Keyword		
8301	General surgery	1	1	General surgery
			2	Transplant surgery
			3	Artificial organs science
			4	Endoscopic surgery
			5	Robotic surgery
		2	6	Experimental surgery
			7	Endocrine surgery
			8	Breast surgery
			9	Surgical metabolism and nutrition
8302	Digestive surgery	1	1	Esophageal surgery
			2	Gastroduodenal surgery
		2	3	Colorectal surgery
		3	4	Hepatic surgery
			5	Surgery for spleen and portal vein
		4	6	Biliary surgery
			7	Pancreatic surgery
8303	Cardiovascular surgery	1	1	Coronary surgery
			2	Heart valve surgery
			3	Surgery in cardiomyopathy
			4	Congenital cardiovascular surgery
		2	5	Aortic surgery
			6	Peripheral vascular surgery
			7	Phlebosurgery
			8	Lymphology
8304	Respiratory surgery	1	1	Lung surgery
		2	2	Tracheal surgery
			3	Mediastinal surgery
			4	Pleural surgery
			5	Chest wall surgery
8305	Neurosurgery	1	1	Neurotrauma
			2	Cerebrovascular disorders
			3	Neuro-endovascular surgery
			4	Experimental neurosurgery
			5	Diagnostic neuroimaging
		2	6	Neuro-oncology
			7	Functional neurosurgery
			8	Pediatric neurosurgery
			9	Spinal cord/Spinal diseases
			10	Neurosurgical instruments
			11	Stereotactic radiosurgery

（Discipline: Clinical surgery）

Item Number	Research Field			Screening Sub-panel Number / Keyword
8306	Orthopaedic surgery	1	1	Spinal disorders
			2	Muscle/Nerve disorders
			3	Physical therapy and rehabilitation science
		2	4	Bone and soft tissue tumors
			5	Limb reconstruction surgery
			6	Pediatric orthopaedics
			7	Musculoskeletal traumatology
		3	8	Joint disorders
			9	Rheumatic diseases
			10	Bone and cartilage metabolism
			11	Sports medicine
8307	Anesthesiology	1	1	Anesthesiology
			2	Anesthesiology and Resuscitology
		2	3	Perioperative management
			4	Pain management
8308	Urology	1	1	Oncology
		2	2	Neurourology and Urodynamics
			3	Infectious diseases
			4	Regenerative medicine
			5	Regenerative medicine
			6	Teratology
		3	7	Adrenal surgery
			8	Kidney transplantation
			9	Andrology
8309	Obstetrics and gynecology	1	1	Obstetrics
			2	Reproductive medicine
		2	3	Gynecology
			4	Gynecologic oncology
			5	Menopause medicine
8310	Otorhinolaryngology	1	1	Otology
			2	Equilibrium Research
			3	Audiology
		2	4	Rhinology
			5	Allergology
			6	Skull Base Surgery
		3	7	Stomato-pharyngology
			8	Laryngology
			9	Broncho-esophagology
			10	Head and Neck Surgery
8311	Ophthalmology	1	1	Clinical research
			2	Epidemiology study
			3	Social medicine
			4	Ocular biochemistry and molecular biology
			5	Ocular cell biology
			6	Ophthalmic genetics
			7	Ocular histology
			8	Ocular pathology
		2	9	Ocular pharmacology
			10	Ocular physiology
			11	Ocular developmental and regenerative biology
			12	Ocular immunology
			13	Ocular microbiology/Infectious diseases
			14	Science orthoptic
			15	Optics
			16	Ophthalmic medical engineering
8312	Pediatric surgery		1	Pediatric digestive surgery
			2	Fetal surgery
			3	Pediatric urology
			4	Pediatric chest surgery
			5	Pediatric oncology
8313	Plastic surgery		1	Reconstructive surgery
			2	Wound healing science
			3	Microsurgery
			4	Tissue culture/Transplantation
			5	Regenerative medicine
8314	Emergency medicine		1	Intensive care medicine
			2	Trauma surgery
			3	Emergency resuscitation science
			4	Acute toxicology
			5	Disaster medicine

Discipline: Dentistry

Item Number	Research Field			Screening Sub-panel Number / Keyword
8401	Morphological basic dentistry		1	Oral anatomy (including histology/embryology)
			2	Oral pathology
			3	Oral bacteriology
8402	Functional basic dentistry		1	Oral physiology
			2	Oral biochemistry
			3	Dental pharmacology
8403	Pathobiological dentistry/ Dental radiology		1	Experimental oncology
			2	Immunity/Infection/Inflammation
			3	General dental radiology
			4	Oral and maxillofacial diagnostic radiology
8404	Conservative dentistry		1	Operative dentistry
			2	Endodontology
8405	Prosthodontics/ Dental materials science and engineering		1	General prosthodontics
			2	Removable denture prosthodontics
			3	Fixed partial denture prosthodontics
			4	Oral and maxillofacial prosthetics
			5	Stomatognathic function
			6	Dental engineering
			7	Dental materials science
8406	Dental engineering/ Regenerative dentistry		1	Biomaterials science
			2	Regenerative dentistry
			3	Oral implantology
8407	Surgical dentistry	1	1	Oral and maxillofacial surgery
		2	2	Clinical oncology
		3	3	Dental anesthesiology
			4	Laboratory medicine
			5	Oral maxillofacial reconstructive surgery
8408	Orthodontics/ Pediatric dentistry		1	Orthodontics
			2	Pediatric dentistry
			3	Pediatric oral health science
			4	Stomatognathic function and mechanics
8409	Periodontology		1	Pathogenesis and diagnosis
			2	Periodontics
			3	Periodontal tissue engineering
			4	Preventive periodontology
8410	Social dentistry		1	Dental hygiene (including public hygiene/nutrition)
			2	Preventive dentistry
			3	Oral health administration and management
			4	Forensic odontology
			5	Gerodontics
			6	Psychosomatic medicine dentistry
			7	Dental education

Discipline: Nursing

Item Number	Research Field		Screening Sub-panel Number / Keyword
8501	Fundamental nursing	1	Nursing philosophy
		2	Nursing ethics
		3	Nursing art
		4	Nursing education
		5	Nursing management
		6	Nursing policy/Administration
		7	Disaster nursing
		8	History of nursing
8502	Clinical nursing	1	Critical care/Emergency nursing
		2	Perioperative nursing
		3	Adult nursing (chronic)
		4	Rehabilitation nursing
		5	Tarminal care
		6	Oncology nursing
8503	Lifelong developmental nursing	1	Family health nursing
		2	Maternal/Women's health nursing
		3	Midwifery
		4	Child health nursing
8504	Gerontological nursing	1	Gerontological nursing
		2	Psychiatric/Mental health nursing
		3	Home care nursing
		4	Visiting nursing
		5	Family health nursing
		6	Rehabilitation nursing

（Discipline: Nursing）

Item Number	Research Field	Screening Sub-panel Number / Keyword	
8505	Community health nursing	1	Community health nursing
		2	Public health nursing
		3	School nursing
		4	Occupational and environmental health nursing

Ⅳ. Instructions & Procedures for those Who Have Already Been Accepted

1. On the handling of research projects that are scheduled to be continued in FY2013 (hereinafter called "continued research projects").

(1) Specially Promoted Research

1) It is not necessary to submit application forms for research projects the continuation of which has been informally agreed in FY2011 (continued research projects). (However, in order to receive KAKENHI, it is necessary to prepare and to submit the necessary documents like the grant application form, after receiving a notification of the informal decision to offer KAKENHI)

2) However, **if the applicant would like to make significant changes in the research project, he/she needs to submit the application forms**.

Because the application procedure is the same as for "Preparing the Application (Proposal for Grant-in-Aid) and Submitting the Application (Proposal for Grant-in-Aid)" (see page 41), the applicant should verify it. In this case, when preparing the Proposal for Grant-in-Aid, he or she should select the same area as when he or she was accepted for the Desired Area for Screening.

Moreover, since, in this case, the application needs to be screened again, it may happen that the change will not be recognized and that the amount of the budget to be granted will not be granted from FY2013 on.

Moreover, a significant change to the research project can be, concretely speaking, (1) a change to the purpose of the research or a change to the title of the proposed project, (2) a change to the annual plan of the budget that is scheduled to be funded from FY2013 (except a change to the annual plan of the budget brought about by the applicant having obtained maternity leave or childcare leave), (3) an increase or a reduction of the budget, and a shortening of the research period, etc. Please consult in advance with the Scientific Research Aid Division No. 2 of the Department of Research Projects of the Japan Society for the Promotion of Science (JSPS), in order to know whether the change the applicant wants to make falls under these categories (see "Inquiries" on page 149).

(2) Research categories except Specially Promoted Research

1) It is not necessary to submit application forms for research projects the continuation of which

has been informally agreed in FY2011 (continued research projects). (However, in order to receive KAKENHI, it is necessary to prepare and to submit the necessary documents like the grant application form, after receiving a notification of the informal decision to offer KAKENHI)

2) However, **if the applicant would like to make significant changes in the research project, he/she needs to submit the application forms**. Because the application procedure is the same as for "Preparing the Application (Proposal for KAKENHI) and Submitting the Application (Proposal for KAKENHI)" (see page 41), the applicant should verify it. Moreover, **as a general rule, applications for an increase of the budget for continued research projects are not accepted**. In addition, for KAKENHI (Multi-year Fund), applicants can make changes to the annual plan of the research budget, depending on the needs of the research. Therefore, changes to the annual plan of the research budget that is scheduled to be granted from FY2013, do not fall under the category of significant changes in the research project.

Moreover, since, in this case, the application needs to be screened again, it may happen that the change will not be recognized and that the amount of the budget to be granted will not be granted from FY2013 on. Therefore, the applicant should consult in advance with the Scientific Research Aid Division No. 1 of the Department of Research Projects of the Japan Society for the Promotion of Science (JSPS), in order to know whether the change the applicant wants to make falls under these categories (see "Inquiries" on page 149).

Moreover, even if the applicant makes significant changes in a continued research project, the KAKENHI (KAKENHI (Series of Single-year Grants) or KAKENHI (Multi-year Fund)) granted will not change from the KAKENHI that was originally granted.

3) As a general rule, withdrawing from a continued research project and applying for a new research project will not be accepted.

However, in case the applicant changes the research category and aims for a new research development (※), because the research proceeded beyond expectation, and because the original attainment targets of the continued research project have already been reached, he or she can apply for a new research project, after submitting a Notice of Completion of Research Project and a Statement of Reason by October 25 (Thursday), 2012. (Documents that arrive later will not be accepted.)

Moreover, please note that, if the content of the Statement of Reason is deemed inappropriate by the screening panel for applications for new research projects, the research project for which a new application is made becomes ineligible for screening, and that, in this case, no funding of KAKENHI from FY2013 on can be requested for the continued research project that has

already been completed.

※ "Cases where the applicant changes the research category and aims for a new research development" are cases where the applicant makes a change such as, for example, from "Scientific Research (C) (General)" to "Scientific Research (B) (General)". However, it also includes cases where the applicant only makes a change to the screening division, such as, for example, a change from "Scientific Research (A) (General)" to "Scientific Research (A) (Overseas Academic Research)".

2. On the Handling of Continued Research Projects in Which Students Have Joined as Project Members

Students, such as, for example, graduate students, cannot apply for Grants-in-Aid for Scientific Research. Therefore, students cannot apply, even if they hold a position in which they conduct research activities in the research institution to which they belong or in another research institution. Moreover, students cannot participate in research projects as Co-Investigators (*kenkyū-buntansha*) or Co-Investigators (*renkei-kenkyūsha*).

However, persons who have a position consisting of conducting research activities in the research institution to which they belong, as their main work (e.g., university teaching staff, researchers from companies, etc.), and who also have a student status are not included in the term "student" for the purposes of this process.

Moreover, only if they have been implementing research as Principal Investigators since before 2010, they can continue to implement the research project in question.

3. On the Handling of Continued Research Projects in Which the Principal Investigator Has Failed to Submit the Report on the Research Achievements

In the same way as for new research projects, no KAKENHI will be funded to researchers who do not submit the report on the research achievements at the end of the research, without any reason. Moreover, it may happen that the decision to grant the funding to the researcher in question is cancelled, or that an order to return the grant is issued.

Furthermore, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other KAKENHI due to be implemented in the same fiscal year will be suspended.

Ⅴ. Instructions & Procedures for Staff of the Research Institution

A call for proposals for "Grants-in-Aid for Scientific Research KAKENHI" will be conducted together for hitherto known Grants-in-Aid for Scientific Research (hereinafter called "KAKENHI (Series of Single-year Grants)") and Multi-year Fund Scientific Research Grants (hereinafter called "KAKENHI (Multi-year Fund)").

1. Issues to Be Completed Beforehand by the "Research Institution"

(1) Requirements as a "Research Institution" and Procedures for Designation and Change

In order to apply for KAKENHI, a researcher needs to belong to a "Research Institution"

Concerning the "Research Institution" cited here, the following four types of "Research Institution" have been designated as eligible in Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research (announced by the Ministry of Education, Culture, Sports, Science and Technology).

1) Universities and inter-university research institutions
2) MEXT facilities and other institutions engaged in scientific research
3) Technical colleges
4) Institutions designated by the Minister of MEXT (See note.)

(Note) In order to become research institution, institutions not falling under 1) to 3) first need to receive the designation by the Minister of Education, Culture, Sports, Science and Technology (MEXT). Therefore, applicants should consult with the Scientific Research Aid Division of the Research Promotion Bureau of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

Moreover, if changes in one of the following items have been scheduled, institutions that have received the designation by the Minister of Education, Culture, Sports, Science and Technology (MEXT) and already have been recognized as research institution should promptly report the content of these changes to the Scientific Research Aid Division of the Research Promotion Bureau of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

A) abolition or dissolution of the research institution,
B) name and address of the research institution, and name of the representative,
C) matters concerning laws, regulations, endowment acts and other rules that prescribe the purpose of establishment, the business content, and the internal organization of the research institution.

Moreover, **researchers should consider that**, in order to conduct research activities using KAKENHI, **the research institution should meet the requirements mentioned below**.

(Requirements)

A) if a KAKENHI is given, the research activity should be conducted as an activity of the research institution in question,

B) if a KAKENHI is given, the research institution should carry out the management of KAKENHI.

(2) Verification of the Eligibility to Apply of the Affiliated Researcher

Researchers who try to apply for KAKENHI, should meet the requirements 1) and 2) below. Therefore, they should sufficiently verify these requirements with the research institution.

Moreover, graduate students or other students cannot apply, even if they hold a position in which they conduct research activities in the research institution to which they belong or in another research institution.

Researchers who try to apply for KAKENHI, should meet the Eligibility to Apply.**（see page 24）**

1) At the time of the application, a person needs to be recognized by the research institution to which he or she belongs to be a researcher who meets the requirements A), B) and C) below, and needs to be a researcher whose Researcher Information has been registered in e-Rad as "Eligible to Apply for KAKENHI".

(Requirements)

A) **The researcher should belong to the research institution as a person who has *inter alia* the duty to perform research activities within the research institution in question** (irrespective of whether the work is paid or unpaid, full-time of part-time. Moreover, it is not necessary for the researcher to perform these research activities as his or her main duty.)

B) **The researcher should actually be engaged in research activities at the research institution in question** (this does not apply to cases where he or she is only engaged as a research assistant.)

C) **The researcher is not a graduate student or any other category of student.** (However, this does not apply to persons who hold a position consisting of conducting research activities in the research institution to which they belong, as their main work (e.g. university teaching staff, researchers from companies, etc.), and those who also have a student status.)

2) A person should not fall under "Not eligible for receipt of funding" in FY2013, because he or she committed fraudulent use, fraudulent receiving of grants or fraudulent acts of/with KAKENHI or other competitive funding.

Research grant employees, as a rule, need to concentrate on their employment related work according to their employment contract. Therefore, considering the working hours they need to allot to their employment related work, they cannot apply for KAKENHI themselves.

However, if they provide a clear explanation on the time they can spend besides their

employment related work, and if during this time they themselves attempt to conduct research using KAKENHI on their own initiative, it is possible for them to apply for KAKENHI, on condition that the following points have been verified in the research institution. In this case, they can apply as a Principal Investigator, and they can also become Co-Investigators (*kenkyū-buntansha*), Co-Investigators (*renkei-kenkyūsha*), or other project members.

- It has been determined in the employment contract that research grant employees themselves can conduct research on their own initiative, besides their employment related work.
- The employment related work and the work devoted to research that they conduct themselves on their own initiative has clearly been divided in the working hours and the effort.
- Time that can be allotted to research which they attempt to conduct themselves on their own initiative has been secured, besides the time spent for employment related work.

(3) Registration of the Researcher Information in e-Rad

Individuals other than the Principal Investigator who try to apply, being the Co-Investigator(s) (*kenkyū-buntansha*) and the Co-Investigator(s) (*renkei-kenkyūsha*) who make up the Project Members should be individuals of whom the researcher information has been registered in e-Rad as "Eligible to Apply for KAKENHI".

Regarding the registration (renewal) of the researcher information necessary when applying, the person in charge in the research institution to which the researcher belongs should perform the procedures using e-Rad.（if there is any item, such as the institution, the position, or others, that needs to be corrected, even though he or she has already been included in the researcher list of the research institution, the applicant needs to register the correct information on the researcher list.）

For specifics on the method of registration, the research institution should verify the "Manual for Research Institutions to which the Researchers Belong (KAKENHI for Research Institutions)".

Moreover, concerning the registration of the researcher information in e-Rad, there is no registration period (deadline). Therefore, registration is possible at any time.

Moreover, Since Proposals for Grant-in-Aid will not be accepted after the deadline for submission of application documents, applicants should complete the registration (the renewal) of the researcher information early, in order to have sufficient time to submit (send) them.

In order not to negatively affect the compilation of the applications within the research institution, when completing the applications, the research institution should perform the various procedures (including the procedures within the research institution), positioning this specific procedure as one of the important procedures to be performed by the research institution.

(Reference) On "Grant-in-Aid for Research Activity Start-up"

The "Grant-in-Aid for Research Activity Start-up" is aimed at supporting persons who cannot apply for the call for proposals this time, such as researchers who have just been employed by their research institutions, researchers who return from childcare leave or other kinds of leave, or other researchers.
The FY2013 call for proposals for this research category is scheduled to be issued in March 2013. Eligibility to apply is as follows:

(1)Researchers who did not apply for this grant category because they became eligible to apply for a Grant-in-Aid after the 9 November 2012 deadline for applications under the below-listed (*1) categories, openly solicited by MEXT and JSPS from September 2012.

(2)Researchers who were unable to apply for the below-listed (*1) grant categories openly solicited by MEXT and JSPS in September 2012 because they were on leave for child birth and/or infant raising in FY 2012.

(Applicants should verify the details in the Application Procedures of March 2013.)

The research institution is responsible for conducting the registration of the researcher information and other matters in e-Rad. Therefore, applicants should bear this in mind when registering researcher information that may come to fall under the above-mentioned point 1) or when carrying out other procedures.

(*1) Among the Grants-in-Aid for Scientific Research for FY2013 there are "Scientific Research on Innovative Areas", "Specially Promoted Research", "Scientific Research", "Challenging Exploratory Research" and "Grant-in-Aid for Young Scientists".

(4) Verification of the ID and the Password of the Researcher Belonging to the Research Institution

In order to apply for KAKENHI, researchers should perform the procedures, by logging in into e-Rad, and by accessing the "Electronic Application System"), he or she should retain the ID and the Password for e-Rad. For this reason, the research institution should verify whether researchers who are scheduling to apply have an ID and a Password, or not. Especially in the case a researcher who applied has subsequently transferred to another research institution, he or she cannot longer use the ID and the Password that has been provided by the research institution he or she belonged to before the transfer. Therefore, the new research institution the researcher belongs to needs to provide a new ID and Password.

In case there is a researcher who has scheduled to apply and who has no ID or Password, the research institution should deal with this matter as follows.

1) In order to provide the researcher with an ID and a Password, the research institution needs to have an Electronic Certificate for Research Institutions, an ID and a Password. If the research institution has not yet obtained them, it should first of all download a registration form from the e-Rad Portal Site, conduct a registration application in writing.

   It takes approximately two weeks for the "ID and password for use of the research institution" to arrive after registration application the "Application for Use of the Electronic Application System".

   Note 1 Please refer to "Advance Preparation when Using the System"

(http://www.e-rad.go.jp/shozoku/system/index.html) on the e-Rad website for information on downloading the e-Rad electronic certificate, ID and password.

Note 2 Research institutions that already obtained an electronic certificate issued, an ID and a password issued do not need to obtain it again.

Note 3 It is not necessary to obtain an electronic certificate, an ID and a password for each research category of the KAKENHI.

2) After obtaining an ID and a password for use in the research institution, the people in the research institution should provide this ID and password to the researcher who is planning to apply as a Principal Investigator. Please refer to the "Manual for Research Institutions to which the Researchers Belong (Grants-in-Aid for Scientific Research for Research Institutions)" for information on the concrete way how to provide them.

Note 1 Once the ID and the password have been provided they can be used, unless the research institution changes.

Note 2 In case the ID and the Password for e-Rad have already been provided, it is not necessary to provide them a second time.

Note 3 Please be sure to obtain and use the latest version of the Operation Manual.

(5) Submission of a "Self-Assessment Checklist on the Improvement of the System and Other Matters", based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)"

The Research Institution that is applying for KAKENHI should set up a system for the management and audit of public research funds, based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions", and should report on its state of implementation.

Therefore, the Research Institution (including research institutions which are already engaged in a continued research project funded with a KAKENHI) that is applying for KAKENHI should submit a "Self-Assessment Checklist on the Improvement of the System and Other Matters", based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" to the Office of Research Funding Administration of the Promotion Policy Division of the Research Promotion Bureau of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) by **October 5 (Friday), 2012**, using e-Rad. **Please be advised that, in case the report is not submitted, applications of researchers who belong to the research institution in question in the electronic system will not be considered.**

Moreover, if the checklist has already been submitted in April 2012 or later through e-Rad when applying for competitive funding or other kinds of funding that is allotted by the Ministry of

Education, Culture, Sports, Science and Technology (MEXT) or by independent administrative legal entities under the control of the Ministry of Education, Culture, Sports, Science and Technology (MEXT). It is not necessary to submit it again.

When using e-Rad, one needs an Electronic Certificate for Research Institutions, an ID and a Password.

With regard to the checklist submission method, checklist forms and other matters using e-Rad, the research institution should verify the text "Concerning the Form Files 'Self-Assessment Checklist on the Improvement of the System and Other Matters', based on the 'Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)'" on the webpage of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) (http://www.mext.go.jp/a_menu/kansa/houkoku/1301688.htm).
Moreover, the Office of Research Funding Administration of the Promotion Policy Division of the Research Promotion Bureau of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) is scheduled to separately send a notification by e-mail addressed to each research institution (i.e. to the e-mail address of the office representative that has been registered in e-Rad) concerning the submission method of the checklist using e-Rad, forms and other matters. (This notification will also be put on the web page for inquiries as mentioned below.)

Note: After submission of the check list, the research institution may be requested to cooperate in field surveys on the state of the improvement of the system and other matters, conducted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) (including institutions allocating grants), if the need arises.

Please direct inquiries to:

(for inquiries concerning forms of the guidelines and submission)

Office of Research Funding Administration
Promotion Policy Division
Research Promotion Bureau
Ministry of Education, Culture, Sports, Science and Technology (MEXT)
e-mail: kenkyuhi@mext.go.jp
URL: http://www.mext.go.jp/a_menu/kansa/houkoku/1301688.htm

(for inquiries concerning the registration of the research institution in e-Rad)

Helpdesk of the Cross-ministerial Research and Development management system of the Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Tel. 0120-066-877
(office hours: 9:30-17:30, except on Saturdays, Sundays, National Holidays and the New Year

Holidays (from December 29 until January 3))

URL: http://www.e-rad.go.jp/shozoku/system/index.html

(6) On the Submission of the Report on the Research Achievements

The research institution to which researchers belong has to collect and submit the reports on the research achievements. If the research institution has failed, without good reason, to submit the reports on the research achievements at the end of the research, it may happen that it is treated as indicated below. Therefore, it is the responsibility of the representative of the research institution to ensure that the report on the research achievements is submitted without fail.

- No KAKENHI will be funded to researchers who do not submit the report on the research achievements at the end of the research, without good reason. Moreover, it may happen that the decision to grant KAKENHI to the researcher in question is cancelled, or that an order to return the grant is issued. It may also happen that information, such as the name of the research institution to which the researcher in question belongs and other data, is made public.

  Furthermore, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other KAKENHI due to be implemented in the same fiscal year will be suspended.

(7) Obtaining Sufficient Knowledge about the Contents of the Application Procedures

The research institution should beforehand disseminate the contents of the Application Procedures to all the researchers on the campus. JSPS would especially like to request the dispersion of information on the items listed in the Application Procedures and the submission deadlines of application documents, in order to avoid potential misunderstandings.

Moreover, the Application Procedures are available on the section Grants-in-Aid for Scientific Research of the JSPS website (http://www.jsps.go.jp/j-grantsinaid/index.html). The website should be used as a reference.

2. Issues that Need to Be Verified When Compiling the Application Forms (Preparing the Proposal for Grant-in-Aid)

The contents of the Proposals for Grant-in-Aid should be verified in each research institution, and all the Proposals for Grant-in-Aid should be submitted to JSPS together. When doing so, special attention should be paid to the following points.

(1) Verification of the Eligibility to Apply

It should be verified whether the Principal Investigator, the Co-Investigator(s) (*kenkyū-buntansha*) and the Co-Investigator(s) (*renkei-kenkyūsha*) listed in the Proposal for Grant-in-Aid are persons who meet the requirements that are stipulated in the Application Procedures (see page 24), and also whether the researcher information is registered in e-Rad as "Eligible to Apply for KAKENHI".

Moreover, on this occasion, it should certainly be verified whether the researchers who apply are not persons who have been excluded from receiving KAKENHI, due to an inappropriate use of KAKENHI.

(2) Verification of the Registration of the Researcher Information in e-Rad

Regarding the registration (renewal) of the researcher information necessary when applying, the person in charge in the research institution to which the researcher belongs should perform the procedures using e-Rad.

Moreover, if there is any item, such as the institution, the position, or others, that needs to be corrected, even though he or she has already been included in the researcher list of the research institution, the applicant needs to register the correct information on the researcher list. Therefore, this should be verified.

(3) Verification of the Principal Investigator

The research institution should verify whether the Principal Investigator, the Co-Investigator(s) (*kenkyū-buntansha*), the Co-Investigator(s) (*renkei-kenkyūsha*) who have been listed in the Preparing the proposal for grant-in-aid prepared the Preparing the proposal for grant-in-aid after verifying the section "II. Details of the Call for Proposals", which are laid down in the Application Procedures.

(4) Verification of the Written Consent of the Co-Investigator (*kenkyū-buntansha*)

For each Co-Investigator (*kenkyū-buntansha*) who has been listed on the proposal for grant-in-aid, that the Principal Investigator prepared, the research institution should check the Written Consent of the Co-Investigator (*kenkyū-buntansha*) that the Principal Investigator collected.

(5) Verification of the Application Forms

Applicants should verify whether the application forms for grants-in-aid are in conformity with the prescribed format.

Moreover, the format and other matters of the application forms for each research category are as follows.

<table>
<tr><td rowspan="3">Research category</td><td colspan="2">Proposal for grant-in-aid</td></tr>
<tr><td>First part</td><td>Second part</td></tr>
<tr><td>Application information (to be entered in the website)</td><td>Project description file</td></tr>
<tr><td>Specially Promoted Research (New) (English Version)</td><td rowspan="15">To be entered in the electronic application system</td><td>S-1-1 (1)</td></tr>
<tr><td>Specially Promoted Research (New) (Japanese Version)</td><td>S-1-1 (2)</td></tr>
<tr><td>Specially Promoted Research (Continued)</td><td>S-1-2</td></tr>
<tr><td>Scientific Research (S)</td><td>S-1-6</td></tr>
<tr><td>Scientific Research (A)</td><td>S-1-7</td></tr>
<tr><td>Research related to the screening panel for Overseas Academic Research</td><td>S-1-9</td></tr>
<tr><td>Scientific Research (B)</td><td>S-1-7</td></tr>
<tr><td>Research related to the screening panel for Overseas Academic Research</td><td>S-1-9</td></tr>
<tr><td>Scientific Research (C)</td><td>S-1-8</td></tr>
<tr><td>Challenging Exploratory Research</td><td>S-1-10</td></tr>
<tr><td>Grant-in-Aid for Young Scientists (A)</td><td>S-1-12</td></tr>
<tr><td>Grant-in-Aid for Young Scientists (B)</td><td>S-1-13</td></tr>
<tr><td>Continued Research Project (in the case of a major change in the research project)</td><td>S-1-14</td></tr>
</table>

3. Submission and other matters of the Application Forms (Preparing the Proposal for Grant-in-Aid) Outline of the Electronic Application Procedures

(1) The research institution should login in e-Rad, using the ID and the password for e-Rad, access the "Electronic Application System", obtain the information of the Proposals for Grant-in-Aid (PDF files) that the Principal Investigators prepared, and verify their contents and other matters.

(2) The research institution should perform the "approval" process on all the proposals for grant-in-aid (PDF files) that have no mistakes in their contents. (It should submit (send) the proposals for grant-in-aid (PDF files) to JSPS.)

The deadline for the submission (sending) of the proposals for grant-in-aid is:

November 9 (Friday), 2012, 4:30 pm (This deadline should be observed strictly.)

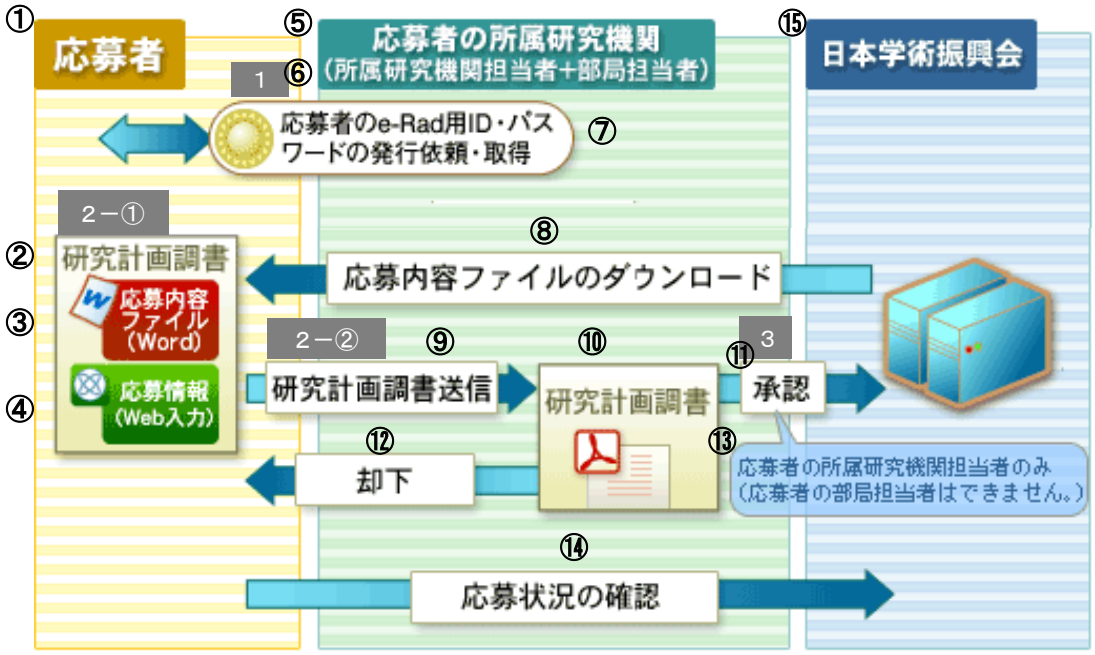
Note 1 Application documents that are submitted (sent) after this deadline will not be accepted. Therefore, the documents should be submitted (sent) well in advance.

Note 2 After the submission (sending) of the application documents, it is not possible to make corrections or to re-submit them.

(3) The electronic certificate, the ID and the password which are used in the e-Rad are designed to verify the research institution and the individual. Therefore, the handling and administration of them should be done carefully when carrying out the application procedures.

Moreover, an outline of the procedures for electronic application can be found below. However, for details on the "Electronic Application System", please refer to the "Operation Manual".

Outline of the Electronic Application Procedures



① applicant
② proposal for grant-in-aid
③ project description file (Word)
④ application information (to be entered in the website)
⑤ the research institution to which the applicant belongs
⑥ person in charge in the research institution + person in charge in the department
⑦ request for issue and acquisition of the applicant's ID and password for e-Rad
⑧ downloading of the project description file
⑨ sending the proposal for grant-in-aid
⑩ proposal for grant-in-aid
⑪ approval
⑫ rejection
⑬ only the person in charge of the research institution to which the applicant belongs (The person in charge of the department of the applicant cannot make an approval.)
⑭ confirmation of the state of the application
⑮ the Japan Society for the Promotion of Science (JSPS)

The person in charge of the research institution to which the applicant (Principal Investigator) belongs

1 The person in charge of the research institution to which the applicant belongs issues the ID and the password to the applicant.

The applicant (Principal Investigator)

2-(1) The applicant logs into e-Rad using the ID and the password he or she received, and then

accesses the “electronic application system” and prepares the proposal for grant-in-aid (PDF file), by entering the application information (to be entered in the website) and by attaching the project description file (items in the attached file).

2-(2) If there are no mistakes in the proposal for grant-in-aid (PDF file) the applicant prepared, he or she should submit (send) the proposal for grant-in-aid (PDF file) to the person in charge of the research institution to which he or she belongs, by performing the “completed and submission” .

The person in charge of the research institution to which the applicant (Principal Investigator) belongs

3 By approving the proposal for grant-in-aid (PDF file) the person in charge of the research institution to which the applicant belongs submits (sends) it to JSPS.

Moreover, if the proposal for grant-in-aid (PDF file) that the applicant submitted is not approved due to mistakes or other reasons, it will be rejected and the applicant will be requested to make corrections.

(Reference 1) Screening Panels and Other Matters

1. Screening Panels

The screening for KAKENHI is carried out by the Scientific Research Grant Committee of the Japan Society for the Promotion of Science (JSPS), and it is based on the application documents (Proposal for grant-in-aid).

For “Specially Promoted Research”, the judges (i.e. screening committee) are organized separately for each of the three areas (1) humanities/social sciences, (2) science/engineering, and (3) biological sciences. They will make a selection of research projects for which an interview will be organized and conduct the interviews. This selection will be based on the proposals for grants-in-aid and the opinions in writing of the screening panel. (These opinions will be prepared by a panel comprising three persons in charge of writing the opinions, either domestic (based in Japan) or overseas.)

The screening is scheduled to be carried out in two stages. In the first stage of the screening (document-based screening), the committee consists of six judges in the case of “Scientific Research (S)”, “Scientific Research (A/B)” (“General”), and four judges in the case of “Scientific Research (C)”, “Challenging Exploratory Research”, and “Grant-in-Aid for Young Scientists (A/B)”. The judges carry out the screening individually. Subsequently, the second stage of the screening, which takes the form of a conference of judges conducting a screening (collegial screening), is scheduled to be carried out. Furthermore, in the case of “Scientific Research (S)”, screening through an interview is scheduled.

For “Scientific Research (A/B)” (screening division “Overseas Academic Research”) the examination of the applications will be conducted by a collegial meeting which will be organized separately for each the following areas:humanities, social sciences, science/engineering, and biological sciences.

The screening takes place behind closed doors. The submitted application documents are not returned to the applicants.

2. Screening Methods, Key Points, and Other Matters

The “assessment rules” (Rules concerning the screening and assessment for Grants-in-Aid for Scientific Research, called “screening and assessment rules” below) are available on the section Grants-in-Aid for Scientific Research of the JSPS website

(http://www.jsps.go.jp/j-grantsinaid/index.html).

(The “screening and assessment rules” for FY2012 will be posted on the JSPS website around early October.)

3. Notification of the Screening Results

(1) Specially Promoted Research

1) JSPS will issue a notification in writing on the results of the selection of the research projects for which an interview will be organized. (This is scheduled for March)
2) The Ministry of Education, Culture, Sports, Science and Technology (MEXT) will issue a notification in writing to the research institution on whether the research project has been selected or not, based on the results of the screening. (This is scheduled for early April.)
3) JSPS will issue a notification containing the opinions expressed in the screening results and a summary of the state of the screening to the Principal Investigator of the research project that has been selected. JSPS is also planning to make an outline of the opinions expressed in the screening results available to the general public. Moreover, to Principal Investigators who have not been selected a notification containing the approximate ranking among the research projects that have been screened, in addition to the opinions expressed in the screening results and a summary of the state of the screening, is planned to be issued.

(2) Research Categories Other than Specially Promoted Research

1) The results of the selection based on interviews on the proposed project for “Scientific Research (S)” will be notified to the research institution in writing (planned for March).
2) The results of the examination performed by the screening panels will be notified to the research institution in writing (planned for early April. for “Scientific Research (A/B/C)”, “Challenging Exploratory Research”, “Grant-in-Aid for Young Scientists (A/B)”, and for late May for “Scientific Research (S)” and “Grant-in-Aid for Young Scientists (S)”).
3) If researchers who applied for “Scientific Research”, “Challenging Exploratory Research” or “Grant-in-Aid for Young Scientists (A/B)”, and whose applications have not been accepted, wish to have the results of the first stage of the screening disclosed (document-based screening), the approximate ranking per research field (area) and the score (average score) and the “standard-format opinion” given by the judges of the screening committee for each element which is taken into account when rating will be disclosed through the electronic application system.

(Reference 2) Procedures on the Handling of Grants-in-Aid for Scientific Research

(March 30, 1965
Announcement of the MEXT No. 110)

Revision: Bunkoku No. 309 of 1968, Bunkoku No. 159 of 1981, Bunkoku No. 127 of 1985, Bunkoku No. 156 of 1986, Bunkoku No. 35 of 1998, Bunkoku No. 114 of 1999, Bunkoku No. 181 of 2000, Bunkoku No. 72 of 2001, Bunkoku No. 133 of 2001, Bunkoku No. 123 of 2002, Bunkoku No. 149 of 2003, Bunkoku No. 68 of 2004, Bunkoku No. 134 of 2004, Bunkoku No. 1 of 2005, Bunkoku No. 37 of 2006, Bunkoku No. 45 of 2007, and Bunkoku No. 64 of 2008.

Procedures on the Handling of Grants-in-Aid for Scientific Research are stipulated as follows.

Procedures on the Handling of Grants-in-Aid for Scientific Research

(Purpose)

Article 1 The handling of Grants-in-Aid for Scientific Research should comply with the Law Concerning the Optimization of Budgets for Subsidiaries (No, 179, 1955, hereinafter "the Law") and the ordinance for the enactment of the Law Concerning the Optimization of Budgets for Subsidiaries (No. 255, 1955) and with the elements stipulated in these rules.

(Definitions)

Article 2 In these rules, a "Research Institution" is an institution in which academic research is conducted. The items listed below fall under the definition of "Research Institution".

(1) Universities or inter-university research institutions (including corporations that run such organizations and are designated by the Minister of Education, Culture, Sports, Science and Technology, as required by elements stipulated separately)

(2) MEXT's facilities and other organizations engaged in scientific research

(3) Technical colleges

(4) Laboratories and other institutions run by the national or local government, corporations based on a special law, laboratories run by such corporations or corporations based on Article 34 of the Civil Law (No. 89, 1996), that the Minister of Education, Culture, Sports, Science and Technology designates for scientific research, as required by elements stipulated separately.

2. In these rules, the "Principal Investigator" is the researcher who bears the responsibility for the implementation of the project in question as a member of that project that is the object of funding of a grant-in-aid for scientific research, as stipulated in article 2 clause 3 of the Law.
3. In these rules, the "Co-Investigator" (*kenkyū-buntansha*) is a researcher who conducts the project in question in cooperation with the Principal Investigator as a member of that project that is the object of funding of a grant-in-aid for scientific research and in which two or more researchers jointly conduct one research project.
4. In these rules, the "Co-Investigator" (*renkei-kenkyūsha*) is a researcher who participates to research that is a project that is the object of funding of a grant-in-aid for scientific research, in cooperation with the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*), and under the supervision of the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*).
5. In these rules, a "Research Collaborator" is a person, other than the Principal Investigator, the Co-Investigator(s) (*kenkyū-buntansha*) or the Co-Investigator(s) (*renkei-kenkyūsha*), who collaborates in research that is a project that is the object of funding of a grant-in-aid for scientific research.
6. In these rules, "illicit use" is use of the grant-in-aid for scientific research for other purposes, intentionally or by gross negligence, or use that violates the content of the decision to fund the grant-in-aid for scientific research, or the conditions it implies.
7. In these rules, "illicit activities" are forgery, manipulation or plagiarism of data, information or survey results that are appearing in published research results within a project that is the object of funding of a grant-in-aid for scientific research.
8. Among the institutions to which belong people who engage in research and who contribute to the promotion of science, the research laboratories and other institutions or corporations mainly engaging in research (that are established by a corporation or another legal person that is set up according to the laws and ordinances of Japan) are considered as "research institutions", as mentioned in this clause, if they are designated by the Minister of Education, Culture, Sports, Science and Technology, as required by elements stipulated separately.

(The objects of Grants-in-Aid for Scientific Research)

Article 3 Grants-in-Aid for Scientific Research shall mean funding for projects listed under each of the following points.

(1) Basic research activities that are scientifically important and are conducted by a researcher either individually or in as a team of two or more researchers on the same project. This research may also include practical research that is in an elementary stage.

(2) Results of scientific research made public by an individual or a scientific organization

(hereinafter "publication of research results")

(3) Other projects concerning academic research, as stipulated separately by the Minister of Education, Culture, Sports, Science and Technology.

2. Based on the rules in Article 15, Number 1 of the Law on the Japan Society for the Promotion of Science (Law No. 159 of 2002), the Minister of Education, Culture, Sports, Science and Technology provides Grants-in-Aid for Scientific Research to projects conducted by the Japan Society for the Promotion of Science (hereinafter called "JSPS"), as required by elements stipulated separately.

(Projects for which no Grants-in-Aid for Scientific Research will be provided)

Article 4 Notwithstanding of the previous article, no Grants-in-Aid for Scientific Research will be funded for a period stipulated in each of the following numbered points for projects that are conducted by persons (including academic societies, and this also applies for the articles mentioned below) who are mentioned in the following numbered points. However, this does not apply to projects other than projects of which the decision to provide the funding of grants-in-aid for scientific research has been cancelled (hereinafter "project subject to grant cancellation"), according to Clause 1, Article 17 of the Law, for which persons mentioned in number 4 receive funding, and to projects that are conducted based on a plan identical to the proposal for grant-in-aid mentioned in Clause 1 and Clause 3, Article 6.

(1) A person who made fraudulent use of a grant-in-aid for scientific research in a project subject to grant cancellation: from 2 to 5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation, in accordance with Clause 1, Article 18 of the Law. The exact length of the period deemed appropriate (between 2 and 5 years) will be decided, taking into consideration the content of the fraudulent use in question and other factors.

(2) A person who conspired with a person as mentioned in the previous point in fraudulent use of a grant-in-aid for scientific research: the same period as the period during which no grant will be funded for the project conducted by the person mentioned in the previous point, in accordance with the rule in the previous point.

(3) A member of a project subject to grant cancellation who used a grant-in-aid for scientific research in violation of Clause 1, Article 11 of the Law: 2 years starting from the next fiscal year following the fiscal year in which that member has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation. (This does not apply to persons mentioned in the previous point 2.)

(4) A Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who conducted a project

subject to grant cancellation in cooperation with a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who falls under point 1. or 3. (except persons mentioned under the previous point; the same applies to the points below), or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Co-Investigator (*renkei-kenkyūsha*) who falls under point 1. participated, or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Research Collaborator who falls under the same point 1. cooperated: 1 year following the fiscal year in which he/she has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation, in accordance with Clause 1, Article 18 of the Law.

(5) A person who obtained funding by a grant-in-aid for scientific research by deceit or other fraudulent means, or a person who conspired in this deceit or other fraudulent means: 5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant-in-aid for scientific research.

(6) A person of whom it has been established that he/she committed fraudulent acts (including cases where it has been established that the person bears responsibility for the content of a research paper that is connected with to research results of which it has been established that fraudulent acts have been committed): from 1 to 10 years starting from the next fiscal year following the fiscal year in which is has been established that the fraudulent acts in question have been committed. The exact length of the period deemed appropriate (between 1 and 10 years) will be decided in the Academic Deliberation Council for Science and Technology, taking into consideration the content of the fraudulent acts in question and other elements.

2. Notwithstanding the previous article, no Grants-in-Aid for Scientific Research will be provided during a period stipulated separately by the Minister of Education, Culture, Sports, Science and Technology for projects conducted by persons who are listed under each of the following points, and of whom it has been decided that no benefit that is provided by the state or by independent administrative legal entities, as stipulated separately by the Minister of Education, Culture, Sports, Science and Technology (hereinafter called “particular benefit”), will be provided for a certain period.

(1) a person who used a particular benefit for other purposes than the one is intended for, or a person who conspired in use for other purposes in question.

(2) for a project that is the object of funding of a particular benefit, a person who violated the content of the decision to fund him/her a particular benefit, the conditions connected to that funding and other laws and ordinances, or the punishment based on these laws and ordinances by the head of an independent administrative legal entity or a national institution.

(3) a person who obtained the funding a particular benefit by deceit or other fraudulent means,

or a person conspired in its use by deceit or other fraudulent means.

(4) a person of whom it has been established that he/she committed fraudulent acts in a project funded with a particular benefit.

(Applicants for a Grant)

Article 5 The following persons can apply for Grants-in-Aid for Scientific Research mentioned in Numbers 1 and 2, Clause 1, Article 3 (excluding grants mentioned in Clause 2 of the same article; hereinafter called "grant").

(1) The representative of the researchers who conduct scientific research funded with grants for scientific research.

(2) An individual who publishes research results or the representative of an academic society that publishes such results funded with grants for the publication of research results.

(Proposal for grant-in-aid)

Article 6 Persons who attempt to apply for grants (excluding persons who conduct screening and evaluation in JSPS) shall mean persons who beforehand submit a Proposal for Grant-in-Aid on the scientific research or the publication of research results, in a form that is stipulated separately, to the Minister of Education, Culture, Sports, Science and Technology.

2 The submission deadline for the Proposal for Grant-in-Aid mentioned in the previous section is announced every year by the Minister of Education, Culture, Sports, Science and Technology.

3 Persons who attempt to apply for grants, although they conduct screening and evaluation in JSPS, shall mean persons who submit Proposals for Grant-in-Aid concerning their scientific research and other matters to JSPS, as required by elements stipulated separately.

4 The deadline for the abovementioned submission of a proposal for grant-in-aid is announced by JSPS every year.

(Decisions concerning the grants)

Article 7 The Minister of Education, Culture, Sports, Science and Technology decides on the persons who attempt to obtain grants and on the planned amount that they attempt to obtain (hereinafter called the "amount planned to be provided"), based on the Proposal for Grant-in-Aid mentioned in Clause 1 and 3 of the previous article, and beforehand notifies the amount planned to be provided to this person.

2 When deciding on the persons who attempt to obtain grants and the amount planned to be provided, the Minister of Education, Culture, Sports, Science and Technology hears the opinion of the Academic Deliberation Council for Science and Technology concerning the Proposals for Grant-in-Aid that have been submitted to the Minister of Education, Culture, Sports, Science

and Technology. However, in accordance with the provisions of Clause 3 of the previous article, concerning Proposals for Grant-in-Aid that have been submitted to JSPS, receiving a report from JSPS is sufficient, and it is not necessary to hear the opinion of the Academic Deliberation Council for Science and Technology.

Article 8 When persons who received the notification mentioned in Clause 1 of the previous article attempt to apply for grants, they have to submit a grant application form of which the form has been stipulated separately to the Minister of Education, Culture, Sports, Science and Technology, by the time to be prescribed by the Minister of Education, Culture, Sports, Science and Technology.

2 Based on the grant application form mentioned in the previous clause, the Minister of Education, Culture, Sports, Science and Technology decides on the provision of the grant, and notifies the contents of this decision and, in case conditions have been attached to it, these conditions to the person who applied for a grant.

(Changes in the scientific research and other matters)

Article 9 When recipients of a grant attempt to change the contents of the scientific research and other matters or the allocation of the budget (excluding minor changes stipulated separately by the Minister of Education, Culture, Sports, Science and Technology), they should beforehand obtain the approval of the Minister of Education, Culture, Sports, Science and Technology.

(Limitation on the use of the grant)

Article 10 The recipients of a grant should restrict the use of the grant to the costs necessary for the scientific research etc.

(Report on results)

Article 11 Upon completing scientific research etc., the recipients of the grant should promptly fill in and submit the form for reporting the results to the Minister of Education, Culture, Sports, Science and Technology. This also applies where the fiscal year concerning the decision concerning the relevant grant has terminated. The form for the report is available elsewhere.

2 In case there is equipment, furnishings or books (hereinafter called “equipment”) that has been purchased using the grant, a detailed statement on the purchase of equipment and other matters should be attached to the report on results mentioned in the previous clause, using a form stipulated separately.

3 A report on results mentioned in the latter part of the clause 1 should be attached with a document specifying a plan on the scientific research etc. scheduled for the fiscal year that follows.

(Final decision concerning the amount of the grant)

Article 12 After receiving the report mentioned in the early part of Clause 1 in the previous article, the Minister of Education, Culture, Sports, Science and Technology checks the report and conducts an investigation, as necessary. If JSPS concludes that the result of the scientific research etc. agrees with the decision concerning the grant and conditions included in it, JSPS may decide the amount of the grant and report it to the relevant recipient.

(Arrangement and storage of accounts and other matters)

Article 13 Recipients of a grant should retain the accounts on the balance of the grant, retain the receipts and other related documents, and store these accounts and documents for five years after the end of the fiscal year in which the grant has been provided.

(Investigation on accounting)

Article 14 When deemed necessary, the Minister of Education, Culture, Sports, Science and Technology may investigate or issue directives concerning the grant recipient's accounting or demand that a recipient reports on its accounting.

(Investigation on the state of the research and other matters)

Article 15 When deemed necessary, the Minister of Education, Culture, Sports, Science and Technology may request that a grant recipient files a report on the status of his/her scientific research and other matters, or may investigate the status of his/her scientific research and other matters.

(Publication of progress of research)

Article 16 In printing or publication by other means, the Minister of Education, Culture, Sports, Science and Technology may publish all or part of descriptions in the report of results of scientific research and the report mentioned in the previous article that concern the progress of research.

(Donation of equipment and suchlike)

Article 17 If the recipient of a grant mentioned in (1) of Article 5 partly appropriated the grant to the purchase of equipment etc. the recipient should promptly donate the equipment etc. to one or more of the research institutions that the recipient belongs to.

2 In the event that promptly donating the equipment and other things causes inconvenience to the research, recipients of grants mentioned in (1) of Article 5 are allowed not to donate the equipment in question, until the inconvenience to the research in question is resolved, provided that they obtained the approval of the Minister of Education, Culture, Sports, Science and Technology. This applies notwithstanding the provisions in the previous clause.

Article 18 The Minister of Education, Culture, Sports, Science and Technology decides separately on necessary issues concerning Grants-in-Aid for Scientific Research mentioned in Article 3, Clause 1, Number 3.

(Other)

Article 19 The Minister of Education, Culture, Sports, Science and Technology decides on necessary issues concerning the handling of grants other than the issues that have been stipulated in these rules, as they arise.

Additional Rules

These rules take effect from April 1, 1965.

Additional Rule (Bunkoku 309 of November 30, 1968)

These rules take effect from November 30, 1968).

Additional Rule (Bunkoku 159 of October 15, 1981)

This Announcement will be enforced from the day of its promulgation.

Additional Rule (Bunkoku 127 of November 2, 1985)

This Announcement will be enforced from November 2, 1985, and will take effect for grants after FY1985.

Additional Rule (Bunkoku 156 of December 25, 1986)

This Announcement will be enforced from December 25, 1986, and will take effect for grants after FY1986.

Additional Rule (Bunkoku 35 of March 19, 1998)

This Announcement will be enforced from March 19, 1998, and will take effect for grants after FY1998.

Additional Rule (Bunkoku 114 of May 17, 1999)

This Announcement will be enforced from the day of its promulgation and will take effect from April 11, 1999.

Additional Rule (Bunkoku 181 of December 11, 2000)

This Announcement will be enforced from the day (January 6, 2001) of the enforcement of the Law Revising a Part of the Cabinet Act (Law No. 88 of 1999).

Additional Rule (Bunkoku 72 of April 19, 2001)

This Announcement will be enforced from the day of its promulgation and will take effect from April 19, 2001.

Additional Rule (Bunkoku 133 of August 2, 2001)

1 This Announcement will be enforced from the day of its promulgation.

2 Legal entities that, at the time of the enforcement of this announcement, are actually research institutions according to the rules in Article 2, Number 3 of the Rules for the Handling of Grants-in-Aid for Scientific Research before the revision, and institutions that, at the time of the enforcement of this announcement, actually received the designation according to the rules in Number 4 of the same article, will be considered as research institutions that received the designation according to the rules in Article 2, Number 4 of the revised Rules for the Handling of Grants-in-Aid for Scientific Research.

Additional Rule (Bunkoku 123 of June 28, 2002)

This Announcement will be enforced from the day of its promulgation and will take effect for grants after FY2002.

Additional Rule (Bunkoku 149 of September 12, 2003)

1 However, the revised rules in Article 3, Clause 2, the revised rules in Article 5, Clause 1, Clause 3 and Clause 4, and the revised rules in Article 6, Clause 2 will be enforced from October 1, 2003.

2 The rules in Article 3, Clause 3 of the revised Rules for the Handling of Grants-in-Aid for Scientific Research, that are stipulated in this Announcement, will not apply for projects conducted by researchers who in the past conducted a project subject to grant cancellation of which the day when the refunding of the Grant-in-Aid for Scientific Research is ordered falls before the day of the enforcement of this Announcement.

Additional Rule (Bunkoku 68 of April 1, 2004)

1 This Announcement will be enforced from April 1, 2004.

2 The rules in Article 3, Clause 3, Number 3 of the revised Rules for the Handling of Grants-in-Aid for Scientific Research, that are stipulated in this Announcement, will not apply to researchers who conducted a project subject to grant cancellation, using a Grant-in-Aid for Scientific Research of which the decision to fund was made before the enforcement of this Announcement.

Additional Rule (Bunkoku 1 of January 24, 2005)

1 This Announcement will be enforced from the day of its promulgation.

2 The rules in Article 3, Clause 4 and Clause 5 of the revised Rules for the Handling of Grants-in-Aid for Scientific Research, that are stipulated in this Announcement, will not apply to projects conducted by researchers who conducted a project of which the day when the refunding of the Grant-in-Aid for Scientific Research is ordered falls before the day of the enforcement of this Announcement, or researchers who conspired with these researchers in question.

Additional Rule (Bunkoku 37 of March 27, 2006)

This Announcement will be enforced from April 1, 2006.

Additional Rule (Bunkoku 45 of March 30, 2007)

This Announcement will be enforced from April 1, 2007.

Additional Rule (Bunkoku 64 of May 19, 2008)

1 This Announcement will take effect from May 19, 2008, and will take effect for grants after FY2008. However, the revised rules in Article 2, Clause 1, Number 4 take effect from the day of the enforcement of the Law on the Adjustment of Related Laws Upon the Enforcement of the Law on General Corporate Juridical Persons and General Foundational Juridical Persons, and the Law on the Authorization of Public Interest Incorporated Associations and Public Interest Incorporated Foundations (Law No. 50 of 2006).

2 The rules in Article 4, Clause 1, Number 1 and Number 3 of the revised Rules for the Handling of Grants-in-Aid for Scientific Research (hereinafter called "New Rules"), stipulated in this Announcement, do not apply to persons who committed illicit use of grants in projects of which the decision to fund the Grant-in-Aid for Scientific Research has been cancelled, in accordance with the rules in Article 17, Clause 1 of the Law Concerning the Optimization of the Enforcement of Budgets for Grants (Law No. 179 of 1955; hereinafter called "the Law"), and of which the day when the refunding of the Grant-in-Aid for Scientific Research is ordered falls before September 12, 2003, in accordance with the rules in Article 18, Clause 1 of the Law. The rules in Article 4, Clause 1, Number 1 and Number 3 of the New Rules do not apply either to recipients of funded projects who conducted use of Grants-in-Aid for Scientific Research in violation of the rules in Article 11, Clause 1 of the Law (excluding persons who are defined as recipients of funded projects according to the Article 2, Clause 3 of the Law and who fall under Article 4, Clause 1, Number 1 or Number 2 of the New Rules).

3 The rules in Article 4, Clause 1, Number 4 of the New Rules do not apply to Principal Investigators or Co-Investigators (*kenkyū-buntansha*) of projects of which the decision to fund has been taken before April 1, 2004.

4 The rules in Article 4, Clause 1, Number 2 and Number 5 of the New Rules do not apply to persons who conspired in the fraudulent use of Grants-in-Aid for Scientific Research, or persons who received the funding of Grants-in-Aid for Scientific Research by deceit or other fraudulent means, or persons who conspired in the use of deceit or other fraudulent means in question, in projects of which the day when the refunding of the Grant-in-Aid for Scientific Research is ordered falls before January 24, 2005.

(Reference 3) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants))

(Rule No. 17, October 7, 2003)

Revision: Rule No. 9, April 14, 2004
Revision: Rule No. 14, September 10, 2004
Revision: Rule No. 1, February 2, 2005
Revision: Rule No. 7, April 7, 2005
Revision: Rule No. 9, April 14, 2006
Revision: Rule No. 12, April 2, 2007
Revision: Rule No. 9, June 10, 2008
Revision: Rule No. 6, April 19, 2010
Revision: Rule No. 21, September 7, 2010
Revision: Rule No. 18, April 25, 2011
Revision: Rule No. 20, April 28, 2011

(General rules)

Article 1 The handling of Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)), hereinafter "grants") provided by the Japan Society for the Promotion of Science (hereinafter "JSPS") should comply with the Law Concerning the Optimization of Budgets for Subsidiaries (No, 179, 1955, hereinafter "the Law"), the ordinance for the enactment of the Law Concerning the Optimization of Budgets for Subsidiaries (No. 255, 1955), Japan Society for the Promotion of Science Act (No. 159, 2002) and the handling rules for the Grants-in-Aid for Scientific Research (notification by Ministry of Education, No. 110, 1965, hereinafter "Handling Rules") and the Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (hereinafter "Handling Procedures").

(Objectives)

Article 2 The aim of the Handling Procedures is to specify items for handling the object, application, granting and suchlike concerning a grant provided by JSPS to researchers so that the grant can be appropriately and efficiently used in compliance with Clause 1, Article 16 of the Requirements for Grants-in-Aid for Scientific Research (scientific research etc.) (decision by the Minister of Education, April 12, 1999, hereinafter "Grant Requirements") and Article 14 of Japan Society for the Promotion of Science Work Procedures (Rule No. 1, 2003).

(Definitions)

Article 3 In the Handling Procedures, Grants-in-Aid for Scientific Research (Scientific Research etc.) refers to the following items as specified in Article 3 of the Grant Requirements.

(1) The cost of scientific research that concerns:

a) Specially Promoted Research

b) Scientific Research;

c) Challenging Exploratory Research;

d) Young Scientists ;

e) Research Activity Start-up; or

f) Encouragement of Scientists

(2) Grant-in-Aid for JSPS Fellows

(3) Grant-in-Aid for Creative Scientific Research

(4) Grant-in-Aid for Publication of Scientific Research Results (except those concerning the publication of research results)

2. In these Handling Procedures, a "research institution" refers to an institution as stipulated in Clause 1, Article 2 of the Handling Rules and to an institution in accordance with Clause 8 of the same Article. A research institution is an institution in which academic research is conducted and which falls under any of the definitions mentioned under points 1 to 4 and under point 5.

(1) Universities or inter-university research institutions (including corporations that run such organizations and are designated by the Minister of Education, Culture, Sports, Science and Technology)

(2) MEXT's facilities and other organizations engaged in scientific research

(3) Technical colleges

(4) Laboratories and other institutions run by the national or local government, corporations based on a special law, laboratories run by such corporations or corporations based on Article 34 of the Civil Law (No. 89, 1996), that the Minister of Education, Culture, Sports, Science and Technology designates for scientific research

(5) Among the institutions to which belong people who engage in research and who contribute to the promotion of science, the research laboratories and other institutions or corporations mainly engaging in research (that are established by a corporation or another legal person that is set up according to the laws and ordinances of Japan) are considered as "research institutions", as mentioned in this clause, if they are designated by the Minister of Education, Culture, Sports, Science and Technology.

3. In these Handling Procedures the "Principal Investigator" is the researcher who bears the responsibility for the implementation of the project in question as a member of that project that

is the object of funding of a grant-in-aid for scientific research, as stipulated in article 2 clause 3 of the Law.

4. In these Handling Procedures the "Co-Investigator" (*kenkyū-buntansha*) is a researcher who conducts the project in question in cooperation with the Principal Investigator as a member of that project that is the object of funding of a grant-in-aid for scientific research and in which two or more researchers jointly conduct one research project.
5. In these Handling Procedures the "Co-Investigator" (*renkei-kenkyūsha*) is a researcher who participates to research that is a project that is the object of funding of a grant-in-aid for scientific research, in cooperation with the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*), and under the supervision of the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*).
6. In these Handling Procedures a "Research Collaborator" is a person, other than the Principal Investigator, the Co-Investigator(s) (*kenkyū-buntansha*) or the Co-Investigator(s) (*renkei-kenkyūsha*), who collaborates in research that is a project that is the object of funding of a grant-in-aid for scientific research.
7. In these Handling Procedures "illicit use" is use of the grant-in-aid for scientific research for other purposes, intentionally or by gross negligence, or use that violates the content of the decision to fund the grant-in-aid for scientific research, or the conditions it implies.
8. In these Handling Procedures "illicit activities" are forgery, manipulation or plagiarism of data, information or survey results that are appearing in published research results within a project that is the object of funding of a grant-in-aid for scientific research.

(The objects of grants)

Article 4 Projects that are object of funding (hereinafter "funded project(s)") with grants should meet the following conditions.

(1) Basic research activities that are scientifically important and are conducted by a researcher either individually or in as a team of two or more researchers on the same project. This research may also include practical research that is in an elementary stage.

(2) Results of scientific research made public by an individual or a scientific organization (hereinafter "publication of research results")

2. The funded costs should be those necessary for a funded project and deemed by JSPS as deserving of a grant.

(Projects for which no grants will be provided)

Article 5 Notwithstanding Clause 1 of the previous article, no grant will be funded for a period stipulated in each of the following numbered points for projects that are conducted by persons

(including academic societies, and this also applies for the articles mentioned below) who are mentioned in the following numbered points. However, this does not apply to projects other than projects of which the decision to provide the funding of grants-in-aid for scientific research has been cancelled (hereinafter "project subject to grant cancellation"), according to Clause 1, Article 17 of the Law, for which persons mentioned in number 4 receive funding, and to projects that are conducted based on a plan identical to the proposal for grant-in-aid mentioned in Clause 1, Article 7.

1. A person who made fraudulent use of a grant-in-aid for scientific research in a project subject to grant cancellation:
   from 2 to 5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation, in accordance with Clause 1, Article 18 of the Law. The exact length of the period deemed appropriate (between 2 and 5 years) will be decided, taking into consideration the content of the fraudulent use in question and other factors.
2. A person who conspired with a person as mentioned in the previous point in fraudulent use of a grant-in-aid for scientific research:
   the same period as the period during which no grant will be funded for the project conducted by the person mentioned in the previous point, in accordance with the rule in the previous point.
3. A member of a project subject to grant cancellation who used a grant-in-aid for scientific research in violation of Clause 1, Article 11 of the Law:
   2 years starting from the next fiscal year following the fiscal year in which that member has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation. (This does not apply to persons mentioned in the previous point 2.)
4. A Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who conducted a project subject to grant cancellation in cooperation with a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who falls under point 1. or 3. (except persons mentioned under the previous point; the same applies to the points below), or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Co-Investigator (*renkei-kenkyūsha*) who falls under point 1. participated, or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Research Collaborator who falls under the same point 1. cooperated:
   1 year following the fiscal year in which he/she has been ordered to refund the grant-in-aid for scientific research related to a project subject to grant cancellation, in accordance with Clause 1, Article 18 of the Law.
5. A person who obtained funding by a grant-in-aid for scientific research by deceit or other

fraudulent means, or a person who conspired in this deceit or other fraudulent means:

5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant-in-aid for scientific research.

6. A person of whom it has been established that he/she committed fraudulent acts (including cases where it has been established that the person bears responsibility for the content of a research paper that is connected to research results of which it has been established that fraudulent acts have been committed): from 1 to 10 years starting from the next fiscal year following the fiscal year in which is has been established that the fraudulent acts in question have been committed. The exact length of the period deemed appropriate (between 1 and 10 years) will be decided, taking into consideration the content of the fraudulent acts in question and other elements.

2. Notwithstanding the provision of Clause 1 of the previous Article, no KAKENHI (Series of Single-year Grants) will be awarded for a period during which it has been decided that no funding provided from the KAKENHI Multi-year Fund will be awarded for projects that are conducted by persons of whom it has been decided that no funding provided from the KAKENHI Multi-year Fund (hereinafter "KAKENHI (Multi-year Fund") in accordance with the provision of Clause 1, Article 18 of the Japan Society for the Promotion of Science Act will be funded for a certain period and who are mentioned in each of the following numbered points. However, this does not apply to projects for which persons mentioned in point 4 already receive funding, and to projects conducted based on a plan identical to the proposal for grant-in-aid mentioned in Clause 1, Article 7.

(1) Persons who made fraudulent use of a KAKENHI (Multi-year Fund).

(2) Persons who conspired in the fraudulent use of a KAKENHI (Multi-year Fund).

(3) Members of a funded project who made use of a KAKENHI (Multi-year Fund) in violation of the provision of Clause 1, Article 11 of the Law which will be applied *mutatis mutandis* pursuant to the provision of Clause 2, Article 17 of the Japan Society for the Promotion of Science Act (This does not apply to persons who fall under the previous point 2).

(4) Principal Investigators or Co-Investigators (*kenkyū-buntansha*) who conducted a project for which the decision to grant the funding has been cancelled (hereinafter "funded project subject to grant cancellation") in cooperation with a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who falls under points 1 or 3 (This does not apply to persons mentioned under the previous point; the same applies to the points below), or Principal Investigators or Co-Investigators (*kenkyū-buntansha*) of a funded project subject to grant cancellation in which a Co-Investigator (*renkei-kenkyūsha*) who falls under point 1 participated or a funded project subject to grant cancellation in which a Research Collaborator who falls under the same point collaborated.

(5) Persons who obtained funding of a KAKENHI (Multi-year Fund) by deceit or other

fraudulent means, or a person who conspired in this deceit or other fraudulent means.

(6) Persons of whom it has been established that they committed fraudulent acts.

3. Notwithstanding Clause 1 of the previous article, a grant will not be granted for a period stipulated in Article 2 of the Decision of the Minister of Education, Culture, Sports, Science and Technology of August 24, 2004 for projects conducted by a person mentioned in each of the following numbered points, about whom it has been decided not to provide him/her a particular benefit for a fixed period, as stipulated in Article 1.

(1) a person who used a particular benefit for other purposes than the one it is intended for, or a person who conspired in use for other purposes in question.

(2) for a project that is the object of funding of a particular benefit, a person who violated the content of the decision to fund him/her a particular benefit, the conditions connected to that funding and other laws and ordinances, or the punishment based on these laws and ordinances by the head of an independent administrative legal entity or a national institution.

(3) a person who obtained the funding a particular benefit by deceit or other fraudulent means, or a person conspired in its use by deceit or other fraudulent means.

(4) a person of whom it has been established that he/she committed fraudulent acts in a project funded with a particular benefit.

(Applicants for a Grant)

Article 6 Persons are eligible to apply for a grant mentioned in Clause 1, Article 4, should meet the following requirements.

(1) Applicants for a grant concerning scientific research should fall into the following categories:

a) If researchers who belong to a research institution conduct scientific research, the representative of the researchers who conduct the scientific research in question;

b) If one researcher (excluding JSPS Fellows) who does not belong to a research conducts scientific research alone, that researcher in question;

c) If a JSPS Fellow conducts scientific research, that JSPS Fellow in question;

d) If a Foreign JSPS Fellow and a host researcher jointly conduct scientific research, the host researcher

(2) An individual who publishes research results or the representative of an academic society that publishes such results funded with grants for the publication of research results.

(Proposal for grant-in-aid)

Article 7 An application for a grant requires that a proposal for grant-in-aid on scientific research or the publication of research results (hereinafter “scientific research etc.”) be submitted to JSPS. The form for the proposal for grant-in-aid is available.

2. The deadline for the abovementioned submission of a proposal for grant-in-aid is announced by JSPS every year.

(Notification of the planned amount of grant)

Article 8 In accordance with a proposal for grant-in-aid mentioned in Clause 1 of the previous article, JSPS should decide the recipient of a grant and the planned amount of money given to the recipient (hereinafter "planned amount of grant") and report the amount to the recipient in advance.

(Allocation of the screening and other matters)

Article 9 When making decisions concerning the recipient of a grant or the planned amount of a grant in accordance with the previous article, JSPS should consult the Grants-in-Aid for Scientific Research Committee to discuss issues concerning the allocation of grants and suchlike.

2. Rules on the organization and operation of the abovementioned committee are stated elsewhere.

(Grant application form)

Article 10 When filing an application for a grant, an applicant who received a notification mentioned in Article 8 should fill in and submit the grant application form to JSPS by the deadline specified by JSPS.

(Decisions concerning the grants)

Article 11 Upon receiving a request for a grant in accordance with the previous article, JSPS should check documents concerning the request and conduct field survey or suchlike necessary, to make sure that the project deserves the grant and the calculation of the amount of the grant is not erroneous.

2. If JSPS considers that a grant should be given as a result of the abovementioned survey, it should promptly decide on providing the grant.

3. JSPS stipulates the following requirements for providing a grant.

(1) A change in details and cost allocation of scientific research etc. conducted by a grant recipient requires that the approval of JSPS be obtained in advance.

However, this may not apply to a minor change that is decided by JSPS in consultation with the Minister of Education, Culture, Sports, Science and Technology without compromising the objective of the funded project.

(2) Grant recipients should obtain the approval of JSPS in stopping or discontinuing a funded project.

(3) If a funded project cannot be completed within the scheduled period or if the fulfillment of a funded project seems too difficult, the grant recipient should promptly report it to JSPS and follow its directions.

(4) To sign a contract to fulfill a funded project and make the relevant payments, the grant recipient should, in compliance with the national contract and the provisions concerning payment, endeavor to maintain the high level of efficiency in the use of costs so that minimum and equitable costs can result in maximum benefit.

4. After making a decision concerning a grant, JSPS should promptly report details of the decision and the conditions it includes to the relevant applicant.

(Withdrawal of the application)

Article 12 An applicant for a grant may withdraw the application by the date specified by JSPS if the applicant receives the notification mentioned in Clause 4 of the previous article and if the applicant is dissatisfied with the details of the decision on a grant concerning the notification or conditions included in the decision.

2. Withdrawal of an application in accordance with the abovementioned provisions is considered that no decision on a grant to the relevant application has been made.

(Limitation on the use of the grant)

Article 13 The recipients of a grant should restrict the use of the grant to the costs necessary for the scientific research etc.

(Report on results)

Article 14 Upon completing scientific research etc., the recipients of the grant should promptly fill in and submit the form for reporting the results to JSPS. This also applies where the fiscal year concerning the decision concerning the relevant grant has terminated. The form for the report is available elsewhere.

2. A report on results mentioned in the latter part of the previous clause should be attached with a document specifying a plan on the scientific research etc. scheduled for the fiscal year that follows.

(Final decision concerning the amount of the grant)

Article 15 After receiving the report mentioned in the early part of Clause 1 in the previous article, JSPS checks the report and conducts an investigation, as necessary. If JSPS concludes that the

result of the scientific research etc. agrees with the decision concerning the grant and conditions included in it, JSPS may decide the amount of the grant and report it to the relevant recipient.

(Accounting Records and other documents)

Article 16 Recipients of a grant should retain the accounts on the balance of the grant and retain the receipts and other related documents for five years after the end of the fiscal year in which the grant has been provided.

2. If persons who did not submit the report on the research achievements by the time prescribed by JSPS in the previous Clause do not submit the report on the research achievements without particular reason by the time separately and additionally instructed by JSPS, JSPS will, notwithstanding the provisions of Article 8, not notify these persons of the amount planned to be provided. This also applies to persons who do not submit the report on the research achievements for KAKENHI (Series of Single-year Grants) mentioned in Clause 1, Article 13 of the Handling Rules, or the report on the research achievements for KAKENHI (Multi-year Fund) mentioned in Clause 1, Article 16 of the Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)), by the time instructed by the Minister of Education, Culture, Sports, Science and Technology or JSPS.
3. When persons about whom it has been decided not to notify the amount planned to be provided in accordance with the provisions of the previous Clause submit the report on the research achievements by the time instructed by JSPS of the Minister of Education, Culture, Sports, Science and Technology, JSPS will notify the amount planned to be provided afterwards, based on the provisions of Article 8.

(Investigation on accounting)

Article 17 When deemed necessary, JSPS may investigate or issue directives concerning the grant recipient's accounting or demand that a recipient reports on its accounting.

(Investigation on the state of the research and other matters)

Article 18 When deemed necessary, JSPS may demand that a grant recipient files a report on the status of its scientific research etc. and may also conduct an on-site investigation.

(Publication of progress of research)

Article 19 In printing or publication by other means, JSPS may publish all or part of descriptions in the report of results of scientific research and the report mentioned in the previous article that concern the progress of research.

(Publication of progress of research and research achievements)

Article 20 JSPS may publish all or part of the portion related to the progress of the research in the report on the results of the scientific research or the report mentioned in the previous Article, in print or other means.

2. JSPS may publish all or part of the report on the research achievements, in print or other means.

(Donation of equipment and suchlike)

Article 21 If the recipient of a grant mentioned in (1) a) of Article 6 partly appropriated the grant to the purchase of equipment etc., the recipient should promptly donate the equipment etc. to one or more of the research institutions that the recipient belongs to.

2. If the recipient of a grant mentioned in (1) b) of Article 6 partly appropriated the grant to the purchase of equipment etc. worth 50,000 yen or more, the recipient should donate the equipment etc. to a school or other educational or research institution no later than the termination of the research period.
3. If the recipient of a grant specified in (1) c) or d) in Article 6, Clause 1 partly appropriated the grant to the purchase of equipment etc. the recipient should promptly donate the equipment etc. to the research institution where he/she engages in research or to which he/she belongs.
4. Where it is deemed inconvenient for a grant recipient to promptly donate the purchased equipment etc. to the research institution, the equipment etc. may not be donated until the time the abovementioned donation is no longer likely to create such inconvenience, provided that JSPS's approval is obtained, notwithstanding the provisions in Clause 1.
5. Notwithstanding Clause 3, a special researcher may keep the purchased equipment etc. until when he/she is no longer qualified as a special researcher.

(Other)

Article 22 In addition to those specified in the Application Procedures, the rules necessary for the handling of grants should be provided elsewhere in the application guidelines and suchlike.

Additional Rules

The rules will be enforced on October 7, 2003 and take effect on October 1, 2003.

The provisions in Article 4-2 do not apply to a funded project that is going to be implemented by a researcher who, before September 12, 2003, was ordered to refund Grants-in-Aid for Scientific Research to his/her project subject to grant cancellation in accordance with Clause 1, Article 18 of the Law.

The JSPS's handling of Grants-in-Aid for Scientific Research before the day the Handling

Procedures take effect in compliance with JSPS Grants-in-Aid for Scientific Research (Scientific Research) Handling Procedures (Rule No. 6, June 9, 1999) is deemed as JSPS's handling of a grant in accordance with the relevant provisions in the Handling Procedures.

Additional Rule (No. 9, 2004)

1. Takes effect on April 1, 2004
2. Provisions in No. 3 of Clause 1, Article 4-2 do not apply to researchers who conducted a project subject to grant cancellation for which the grant was decided before the time the Rules take effect.

Additional Rule (No. 14, 2004)

Takes effect on August 27, 2004

Additional Rule (No. 1, 2005)

1. Takes effect on January 24, 2005
2. Clauses 2 and 3 of Article 4-2 do not apply to projects conducted by a researcher who was ordered to refund Grants-in-Aid for Scientific Research before the day the Rules take effect, or who conspired with such a researcher.

Additional Rule (No. 7, 2005)

Takes effect on April 1, 2005

Additional Rule (No. 9, 2006)

Takes effect on April 1, 2006

Additional Rule (No. 12, 2007)

Takes effect on April 1, 2007

Additional Rule (No. 9, 2008)

1. This rule was set up from June 10, 2008, and takes effect for the grants of FY2008 and later.
2. The rules No. 1 and No. 3 of clause 1, article 5 of the revised Handling Procedures (hereinafter "New Procedures") do not apply to persons who conducted illicit use in projects of which the decision to fund a grant was cancelled, or to project members who used a grant-in-aid for scientific research in a way that violates the rules under clause 1, article 11 of the Law, in projects of which the day when the return of the grant-in-aid for scientific research was ordered fell before September 12, 2003. This is in accordance with the rules of clause 1 of article 18 of

the Law. (This does not apply to the persons mentioned in No. 1 or No. 2, clause 1, article 5 of the New Procedures.)

3. The rule No. 4, clause 1, article 5 of the New Procedures does not apply to the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*) of projects of which the decision on funding of the grant was taken before April 1, 2004.
4. The rules No. 2 and No. 5, clause 1, article 5 of the New Procedures do not apply to persons who conspired in illicit use of grants-in-aid for scientific research, to persons who obtained a grant-in-aid for scientific research by deceit or by other illicit means, or to persons who conspired in this deceit or other illicit means in question, in projects of which the day when the return of the grant-in-aid for scientific research was ordered fell before January 24, 2005.

Additional Rule (No. 6, 2010)
Takes effect on April 1, 2010.

Additional Rule (No. 21, 2010)
Takes effect on September 7, 2010.

Additional Rule (No. 18, 2011)
Takes effect on April 1, 2011.

Additional Rule (No. 20, 2011)
Takes effect on April 28, 2011.

(Reference 4) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund))

(General rules)

Article 1 The handling of Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund), hereinafter "grants") provided by the Japan Society for the Promotion of Science (hereinafter "JSPS") should comply with the Japan Society for the Promotion of Science Act (No. 159, 2002, hereinafter "JSPS Act"), the Law Concerning the Optimization of Budgets for Subsidiaries (hereinafter "the Law"), which will be applied *mutatis mutandis* pursuant to Clause 2, Article 17 of the JSPS Act, the Ordinance for the Enactment of the Law Concerning the Optimization of Budgets for Subsidiaries (No. 255, 1955), the Basic Policy on the Management of the KAKENHI (Multi-year Fund) (decision by the Minister of Education, Culture, Sports, Science and Technology made on April 28, 2011), and these Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (hereinafter "Handling Procedures").

(Objectives)

Article 2 The aim of these Handling Procedures is to specify the details concerning the handling of the eligibility for funding, application, funding and other matters for grants provided by JSPS to researchers, based on the provisions of point 6, Article 7 of the Requirements for Grants-in-Aid for Scientific Research (KAKENHI Multi-year Fund) (decision by the Minister of Education, Culture, Sports, Science and Technology made on April 28, 2011), so that the grant can be appropriately and efficiently implemented.

(Definitions)

Article 3 In these Handling Procedures, a "research institution" refers to an institution as stipulated in Clause 1, Article 2 of the Handling Rules on Grants-in-Aid for Scientific Research (Announcement of the Ministry of Education, 1965, No. 110; hereinafter "Handling Rules") and to an institution in accordance with Clause 8 of the same Article. A research institution is an institution in which academic research is conducted and which falls under any of the definitions mentioned under points 1 to 4 and under point 5.

(1) Universities or inter-university research institutions (including corporations that run such organizations and are designated by the Minister of Education, Culture, Sports, Science and Technology)

(2) MEXT's facilities and other organizations engaged in scientific research

(3) Technical colleges

(4) Research laboratories and other institutions established by the national or local government, corporations established under a special law, laboratories and other institutions established by such corporations, or general incorporated associations or general incorporated foundations that are designated by the Minister of Education, Culture, Sports, Science and Technology for scientific research

(5) Among the institutions to which belong persons who conduct research and who contribute to the promotion of science, research laboratories and other institutions, or companies and other legal persons (hereinafter in this clause called "companies") mainly engaging in research that are founded by companies established according to the laws and ordinances of Japan, if they are designated by the Minister of Education, Culture, Sports, Science and Technology. (This does not apply to institutions mentioned under point 1 and the previous point 2.)

2. In these Handling Procedures, the "Principal Investigator" is the researcher who bears the responsibility for the implementation of the project as a member of the project in question that is the object of funding of a grant (hereinafter "member of the funded project"), as stipulated in the provisions of Clause 3, Article 2 of the Law.
3. In these Handling Procedures, a "Co-Investigator (*kenkyū-buntansha*)" is a researcher who conducts a project in cooperation with the Principal Investigator as a member of the project in question that is the object of funding of a grant and in which two or more researchers jointly conduct one and the same research project.
4. In these Handling Procedures, a "Co-Investigator (*renkei-kenkyūsha*)" is a researcher who participates in research for a project that is the object of funding of a grant, in cooperation with the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*), and under the supervision of the Principal Investigator or the Co-Investigator(s) (*kenkyū-buntansha*).
5. In these Handling Procedures, a "Research Collaborator" is a person other than the Principal Investigator, the Co-Investigator(s) (*kenkyū-buntansha*) or the Co-Investigator(s) (*renkei-kenkyūsha*), who collaborates in research that is a project that is the object of funding of a grant.
6. In these Handling Procedures, "fraudulent use" is use of the grant for other purposes, intentionally or by gross negligence, or use that violates the substantive content of the decision to fund the grant, or any condition it implies.
7. In these Handling Procedures, "fraudulent acts" are forgery, manipulation or plagiarism of data, information, survey results, etc. that appear in published research results within a project that is the object of funding of a grant.

(Object of funding with grants)

Article 4 Projects that are object of funding with grants are projects that are academically important basic research activities (including applied research that is in an elementary stage) and that are conducted in a research institution by a researcher individually or by two or more researchers as a team on the same research project. The researcher(s) should belong to the research institution as a person who has *inter alia* the duty to perform research activities within the research institution in question and should actually be engaged in research activities at the research institution in question. (This is limited to projects that are conducted as an activity of the research institution to which the researcher(s) belong and where the management of the grants is carried out in the research institution.)

2. The costs that are the object of funding are the costs necessary for the project that is object to funding of grants (hereinafter "funded project") and deemed by JSPS as deserving funding.

3. The period of the funded project is the period decided by JSPS. However, persons who obtained funding of the grant can extend the period of the funded project by one year, provided they obtain the approval of JSPS. Moreover, if researchers obtain maternity leave or childcare leave, they can extend the period by more than one year, depending on the period during which the funded project is discontinued, provided they obtain the approval of JSPS.

(Projects for which no grants will be provided)

Article 5 Notwithstanding the provisions of Clause 1 of the previous Article, no grant will be provided for a period stipulated in each of the following numbered points for projects that are conducted by persons who are mentioned in the following numbered points. However, this does not apply to projects other than projects of which the decision to provide the funding of grants has been cancelled (hereinafter "project subject to grant cancellation"), according to the provisions of Clause 1, Article 17 of the Law, for which persons mentioned in number 4 receive funding.

(1) A person who made fraudulent use of a grant in a project subject to grant cancellation:
from 2 to 5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant related to a project subject to grant cancellation, in accordance with the provisions of Clause 1, Article 18 of the Law. The exact length of the period deemed appropriate (between 2 and 5 years) will be decided, taking into consideration the content of the fraudulent use in question and other relevant factors.

(2) A person who conspired with a person as mentioned in the previous point in fraudulent

use of a grant:

the same period as the period during which no grant will be funded for the project conducted by the person mentioned in the same point, in accordance with the provisions in the previous point.

(3) A member of a funded project subject to grant cancellation who used a grant in violation of the provisions of Clause 1, Article 11 of the Law:

2 years starting from the next fiscal year following the fiscal year in which that member has been ordered to refund the grant related to a project subject to grant cancellation, in accordance with the provisions of Clause 1, Article 18 of the Law. (This does not apply to persons mentioned in the previous point 2.)

(4) A Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who conducted a project subject to grant cancellation in cooperation with a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) who falls under point 1 or 3 (except persons mentioned under the previous points; the same applies to the points below), or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Co-Investigator (*renkei-kenkyūsha*) who falls under point 1 participated, or a Principal Investigator or a Co-Investigator (*kenkyū-buntansha*) of a project subject to grant cancellation in which a Research Collaborator who falls under the same point 1 cooperated:

1 year following the fiscal year in which he/she has been ordered to refund the grant related to a project subject to grant cancellation, in accordance with the provisions of Clause 1, Article 18 of the Law.

(5) A person who obtained funding of a grant by deceit or other fraudulent means, or a person who conspired in the use of a grant by this deceit or other fraudulent means in question:

5 years starting from the next fiscal year following the fiscal year in which that person has been ordered to refund the grant in question.

(6) A person of whom it has been established that he/she committed fraudulent acts (including cases where it has been established that the person bears responsibility for the content of a research paper that is connected to the research results of which it has been established that the fraudulent acts in question have been committed; the same applies to the Articles below):

from 1 to 10 years starting from the next fiscal year following the fiscal year in which it has been established that the fraudulent acts in question have been committed. The exact length of the period deemed appropriate (between 1 and 10 years) will be decided, taking into consideration the content of the fraudulent acts in question and other relevant factors.

2. Notwithstanding the provisions of Clause 1 of the previous Article, no grant will be funded for projects that are conducted by persons of whom it has been decided that no KAKENHI

(Series of Single-year Grants) will be funded for a certain period during the corresponding period, in accordance with the provisions of Clause 1, Article 4 of the Handling Rules or Clause 1, Article 5 of the Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (hereinafter "Single-year Grant Handling Procedures"). However, this does not apply to projects for which persons of whom it has been decided that no KAKENHI (Series of Single-year Grants) will be funded, in accordance with the provisions of point 4, Clause 1, Article 4 of the Handling Rules or point 4, Clause 1, Article 5 of the Single-year Grant Handling Procedures, have already obtained funding.

3. Notwithstanding the provisions of Clause 1 of the previous Article, no grant will be funded for a period stipulated in Article 2 of the Decision on Particular Benefits and Other Matters of Clause 3, Article 4 of the Procedures on the Handling of Grants-in-Aid for Scientific Research (decided by the Minister of Education, Culture, Sports, Science and Technology on August 24, 2004; hereinafter "Decision by the Minister of Education"), for projects conducted by persons mentioned in each of the following numbered points, of whom it has been decided not to provide them with a particular benefit for a certain period, as stipulated in Article 1 of the Decision by the Minister of Education.

(1) Persons who used the particular benefit for other purposes than the one it is intended for, or a person who conspired in the use for other purposes

(2) For a project that is the object of funding of a particular benefit, persons who violated the substantive content of the decision to fund them the particular benefit, any condition connected to the funding, and other laws and ordinances, or the punishment based on these laws and ordinances imposed by the head of a national institution or independent administrative legal entity

(3) Persons who obtained funding of a particular benefit by deceit or other fraudulent means, or persons who conspired in this deceit or other fraudulent means

(4) Persons of whom it has been established that they committed fraudulent acts in a project funded with a particular benefit

(Applicants for a Grant)

Article 6 Persons who can apply for funding of a grant mentioned in Clause 1, Article 4 are representatives of researchers who conduct the funded project.

(Proposal for grant-in-aid)

Article 7 Persons who wish to apply for funding of a grant need to submit a proposal for grant-in-aid for the project to JSPS in advance, using the form specified.

2. The deadline for the submission of the proposal for grant-in-aid mentioned in the previous Clause is announced by JSPS every year.

(Notification of the amount planned to be provided)

Article 8 Based on the proposal for grant-in-aid mentioned in Clause 1 of the previous Article, JSPS decides to whom to provide a grant and the amount it plans to provide (hereinafter "amount planned to be provided") and notifies the amount planned to be provided to the recipient in advance.

(Allocation of the screening and other matters)

Article 9 When making decisions to whom to provide a grant and the amount planned to be provided in accordance with the previous Article, JSPS should consult the Grants-in-Aid for Scientific Research Committee to discuss issues concerning the allocation of grants and other matters.

2. The rules on the organization and operation of the Committee mentioned in the previous Clause are stated elsewhere.

(Grant application form)

Article 10 When applying for funding of a grant, applicants who received the notification mentioned in Article 8 should fill in and submit the grant application form to JSPS by the deadline specified by JSPS, using the form specified.

(Decisions concerning grants)

Article 11 Upon receiving an application for funding of a grant in accordance with the previous Article, JSPS will screen the documents concerning the application and conduct field surveys or suchlike as the need arises, to make sure that the project deserves the grant and the calculation of the amount of the grant is not erroneous.

2. If JSPS considers that a grant should be provided, as a result of the investigation mentioned in the previous Clause, it will make a prompt decision.

3. JSPS stipulates the following requirements for providing a grant.

(1) When researchers who obtained funding of a grant wish to change the details and cost allocation of the funded project, they should obtain the prior approval from JSPS.
However, this does not apply to minor changes that are decided by JSPS in consultation with the Minister of Education, Culture, Sports, Science and Technology without compromising the objective of the funded project.

(2) If researchers who obtain funding of a grant cancel or discontinue the funded project,

they should obtain approval from JSPS.

(3) If researchers who obtain funding of a grant cannot complete a funded project within the scheduled period, or if the implementation of a funded project seems too difficult, they should promptly report this to JSPS and follow any instructions that may be provided.

(4) If researchers who obtain funding of a grant conclude a contract in order to implement a funded project and make the relevant payments, they should, in compliance with the national contract and the intent of the provisions concerning payment, endeavor to maintain a high level of efficiency in the use of costs, so that equitable and minimum costs result in maximum benefit.

4. After making a decision concerning the funding of a grant, JSPS will promptly notify the details of the decision and the conditions it implies to the person who applied for the grant.

(Withdrawal of application)

Article 12 If researchers who applied for funding of a grant are dissatisfied with the details of the decision on the funding of the grant mentioned in the notification or any condition implied in this decision, upon receiving this notification in accordance with the provisions of Clause 4 of the previous Article, they may withdraw the application by a date to be decided by JSPS.

2. If the application is withdrawn, in accordance with the provisions of the previous Clause, it is considered that no decision on the funding of the grant related to that application in question has been made.

(Limitations on the use of a grant)

Article 13 Researchers who obtain funding of a grant should restrict the use of the grant to the costs necessary for the funded project.

(Report on the state of implementation)

Article 14 Researchers who obtain funding of a grant should submit a report on the state of implementation which clarifies the state of the implementation of the funded project and the state of the accounting to JSPS within 2 months following the end of each fiscal year, except for the final fiscal year, using the form specified.

2. Through screening of the submitted report on the state of implementation and an investigation conducted as the need arises, JSPS verifies whether the implementation of the research corresponds with the content of the decision on the funding of the grant and any conditions it implies.

(Report on results)

Article 15　Upon completion of the funded project, researchers who obtained funding of a grant should promptly complete and submit a report on results to JSPS, using the form specified.

(Final decision concerning the amount of the grant)

Article 16　After receiving the report on results submitted in accordance with the provisions of the previous Article, JSPS screens this report on results and conducts an investigation, as the need arises. If JSPS has verified that the result of the funded project corresponds with the contents of the decision concerning the funding of the grant and the conditions it implies, JSPS makes a final decision on the amount of the grant that should be provided and notifies this to the relevant recipient. In this case, JSPS may implement aforementioned, after verification of the portion that has been implemented in the relevant fiscal year, except for the final fiscal year of the funded project, based on the content verified in accordance with Clause 2, Article 14.

(Report on research achievements)

Article 17　Researchers who obtained funding of a grant should submit a report on the achievements of the implemented project based on the plan in the proposal for grant-in-aid mentioned in Clause 1, Article 7 (hereinafter "report on the research achievements") to JSPS by the date decided by JSPS, accordance with the requirements decided by JSPS.

2. If persons who did not submit the report on the research achievements by the time prescribed by JSPS in the previous Clause do not submit the report on the research achievements without particular reason by the time separately and additionally instructed by JSPS, JSPS will, notwithstanding the provisions of Article 8, not notify these persons of the amount planned to be provided. Moreover, if the decision to provide the grant has already been made, the payment of the grant will be retained. This also applies to persons who do not submit the report on the research achievements for grants mentioned in Clause 1, Article 13 of the Handling Rules or Clause 1, Article 16 of the Procedures on the Handling of grants, by the time instructed by the Minister of Education, Culture, Sports, Science and Technology or JSPS.
3. When persons of whom it has been decided not to notify the amount planned to be provided to them, in accordance to the provisions of the previous Clause, afterwards submit the report on the research achievements by the time instructed separately by JSPS or the Minister of Education, Culture, Sports, Science and Technology, JSPS should notify the amount planned to be provided to them, based on the provisions of Article 8. Moreover,

when persons, of whom the payment of the grant has been retained, in accordance with the provisions of the previous Clause, afterwards submit the report on the research achievements by the time instructed separately by JSPS or the Minister of Education, Culture, Sports, Science and Technology, JSPS may revoke the retention of the payment.

(Accounting records and other documents)

Article 18 Researchers who obtained funding of a grant should retain the accounting records on the balance of the grant, sort out receipts and other related documents, and store them for five years after the completion of the project for which the grant has been provided.

(Investigation on accounting)

Article 19 When deemed necessary, JSPS may investigate or provide guidance on the accounting of the grant of researchers who obtained funding, or demand that they report on the accounting.

(Investigation on the state of the funded project)

Article 20 When deemed necessary, JSPS may require that researchers who obtained funding of a grant submit a report on the state of the funded project, and may also conduct an on-site investigation.

(Publication of progress of research and research achievements)

Article 21 Among the reports related to the funded project, JSPS may publish all or part of the portion related to the progress of the research in the report on the state of implementation, the report on results and the report mentioned in the previous Article, in print or other means.

2. JSPS may publish all or part of the report on the research achievements, in print or other means.

(Donation of equipment and suchlike)

Article 22 If persons who obtained funding of a grant mentioned in Article 6 purchased equipment, implements or books (hereinafter “equipment”) with the grant, they should promptly select one or more appropriate research institutions from among the research institutions to which they belong, and donate the equipment.

2. Where it is deemed inconvenient for the research of the persons who obtained funding of a grant to promptly donate the purchased equipment, the equipment may not be donated until the necessity for the research disappears, provided that the approval of JSPS is

obtained, notwithstanding the provisions in the previous Clause.

(Other)

Article 23　In addition to the rules specified in these Handling Procedures, the rules necessary for the handling of grants should be provided elsewhere in the Application Guidelines and suchlike.

Additional Rule (No. 19, 2011)

This rule takes effect from April 28, 2011.

(Reference 5) State of Allocation of Grants-in-Aid for Scientific Research for FY2012 and Other Matters

1. State of Allocation of Grants-in-Aid for Scientific Research for FY2012

(1) New Projects

As of April 2012

Research category	Number of proposed projects			Amount allocated	Amount allocated per project	
	Applications	Applications approved	Approval rate		Average	Maximum
	#	#	%	(1,000 yen)	(1,000 yen)	(1,000 yen)
Grants-in-aid for Scientific Research	〔 89,800 〕 86,874	〔 25,759 〕 24,673	〔 28.7 〕 28.4	〔 62,176,350 〕 56,640,420 【 16,879,536 】	〔 2,414 〕 2,296	〔 32,900 〕 34,400
Scientific Research on Priority Areas(*1)	〔 177 〕 9	〔 80 〕 9	〔 45.2 〕 -	〔 239,600 〕 25,400	〔 2,995 〕 2,822	〔 3,300 〕 3,000
Scientific Research on Innovative Areas(*2) (Research in a proposed research area)	〔 4,072 〕 2,822	〔 1,147 〕 712	〔 28.2 〕 25.2	〔 3,683,150 〕 2,596,900 【 779,070 】	〔 3,211 〕 3,647	〔 9,000 〕 10,000
Scientific Research(A)	〔 2,180 〕 2,251	〔 565 〕 535	〔 25.9 〕 23.8	〔 7,478,000 〕 6,985,500 【 2,095,650 】	〔 13,235 〕 13,057	〔 32,900 〕 34,400
Scientific Research(B)(*3)	〔 10,127 〕 9,875	〔 2,592 〕 2,440	〔 25.6 〕 24.7	〔 14,688,900 〕 13,200,800 【 3,960,240 】	〔 5,667 〕 5,410	〔 14,300 〕 13,300
Scientific Research(C)(*4)	〔 32,177 〕 32,899	〔 9,620 〕 9,857	〔 29.9 〕 30.0	〔 15,564,500 〕 15,332,520 【 4,599,756 】	〔 1,618 〕 1,555	〔 4,200 〕 3,800
Challenging Exploratory Research(*4)	〔 12,734 〕 12,559	〔 3,809 〕 3,759	〔 29.9 〕 29.9	〔 5,916,100 〕 5,692,800 【 1,707,840 】	〔 1,553 〕 1,514	〔 3,400 〕 3,100
Young Scientists(A)(*3)	〔 1,907 〕 1,796	〔 459 〕 399	〔 24.1 〕 22.2	〔 3,859,300 〕 3,243,100 【 972,930 】	〔 8,408 〕 8,128	〔 21,700 〕 19,700
Young Scientists(B)(*4)	〔 22,688 〕 20,867	〔 6,787 〕 6,255	〔 29.9 〕 30.0	〔 10,396,800 〕 9,213,500 【 2,764,050 】	〔 1,532 〕 1,473	〔 3,400 〕 3,400
Encouragement of Scientists	〔 3,738 〕 3,796	〔 700 〕 707	〔 18.7 〕 18.6	〔 350,000 〕 349,900	〔 500 〕 495	〔 900 〕 800
Publication of Scientific Research Results	〔 1,045 〕 961	〔 521 〕 491	〔 49.9 〕 51.1	〔 1,139,090 〕 1,029,060	〔 2,186 〕 2,096	〔 26,900 〕 20,000
Total	〔 90,845 〕 87,835	〔 26,280 〕 25,164	〔 28.9 〕 28.6	〔 63,315,440 〕 57,669,480 【 16,879,536 】	〔 2,409 〕 2,292	〔 32,900 〕 34,400

Notes:
1. The figures in 〔 〕indicate the previous fiscal year.
2. The figures in【 】indicate indirect costs (excluded from the total).
3. (*1) No call issued in FY 2012 for projects in new or continuing areas. The only call issued is for projects that collate the results of research areas set to have ended in FY 2011.
4. (*2) Only new projects of continued area have been accounted for.
5. (*3) As a portion of these grants is covered under the multi-year Fund, the columns “Amount allocated” and “Amount allocated per project” are calculated based on the projects’ initial plans for FY 2012.
6. (*4) As these grants are covered under the multi-year Fund, the columns “Amount allocated” and “Amount allocated per project” are calculated based on the projects’ initial plans for FY 2012.
7. "Grant-in-Aid for Special Purposes" and "Special Grant-in-Aid for Encouragement of Scientists" are excluded.

(2) Newly approved and continued

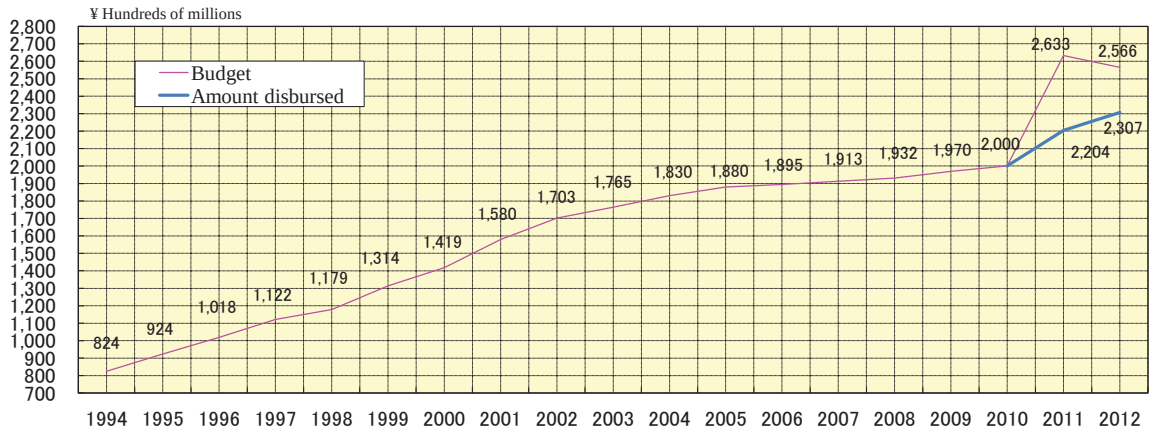
As of April 2012

Research category	Number of proposed projects			Amount allocated	Amount allocated per project	
	Applications	Applications approved	Approval rate		Average	Maximum
	#	#	%	(1,000 yen)	(1,000 yen)	(1,000 yen)
Grants-in-aid for Scientific Research	〔 127,403 〕 130,324	〔 63,310 〕 67,961	〔 49.7 〕 52.1	〔 149,213,117 〕 155,012,892 【 46,134,148 】	〔 2,357 〕 2,281	〔 213,000 〕 159,200
Specially Promoted Research(*1)	〔 64 〕 59	〔 64 〕 59	〔 - 〕 -	〔 4,891,900 〕 4,571,600 【 1,371,480 】	〔 76,436 〕 77,485	〔 213,000 〕 159,200
Scientific Research on Priority Areas	〔 599 〕 117	〔 501 〕 117	〔 83.6 〕 -	〔 3,206,600 〕 882,500	〔 6,400 〕 7,543	〔 45,000 〕 42,000
Scientific Research on Innovative Areas(*2) (Research in a proposed research area)	〔 5,116 〕 4,842	〔 2,191 〕 2,732	〔 42.8 〕 56.4	〔 17,285,350 〕 21,045,350 【 6,313,605 】	〔 7,889 〕 7,703	〔 122,400 〕 135,400
Scientific Research on Innovative Areas(*3) (Research under a proposed research project)	〔 78 〕 1	〔 78 〕 1	〔 - 〕 -	〔 540,900 〕 3,869 【 1,161 】	〔 6,935 〕 3,869	〔 7,900 〕 3,869
Scientific Research(S)(*1)	〔 337 〕 348	〔 335 〕 348	〔 - 〕 -	〔 8,243,100 〕 9,229,300 【 2,768,790 】	〔 24,606 〕 26,521	〔 83,600 〕 87,900
Scientific Research(A)	〔 3,562 〕 3,784	〔 1,940 〕 2,054	〔 54.5 〕 54.3	〔 18,059,800 〕 18,888,800 【 5,666,640 】	〔 9,309 〕 9,196	〔 32,900 〕 34,400
Scientific Research(B)(*4)	〔 15,983 〕 15,837	〔 8,421 〕 8,358	〔 52.7 〕 52.8	〔 33,172,735 〕 32,515,800 【 9,754,740 】	〔 3,939 〕 3,890	〔 14,300 〕 13,300
Scientific Research(C)(*5)	〔 48,621 〕 51,301	〔 26,062 〕 28,211	〔 53.6 〕 55.0	〔 29,056,997 〕 31,815,351 【 9,544,605 】	〔 1,115 〕 1,128	〔 4,200 〕 3,800
Challenging Exploratory Research(*5)	〔 14,576 〕 16,541	〔 5,651 〕 7,735	〔 38.8 〕 46.8	〔 7,665,964 〕 9,476,700 【 2,843,010 】	〔 1,357 〕 1,225	〔 3,400 〕 3,100
Young Scientists(S)(*3)	〔 108 〕 50	〔 107 〕 47	〔 99.1 〕 94.0	〔 1,352,100 〕 540,100 【 162,030 】	〔 12,636 〕 11,491	〔 22,800 〕 19,000
Young Scientists(A)(*4)	〔 2,617 〕 2,646	〔 1,165 〕 1,244	〔 44.5 〕 47.0	〔 6,626,303 〕 6,921,164 【 2,076,349 】	〔 5,688 〕 5,564	〔 21,700 〕 19,700
Young Scientists(B)(*5)	〔 31,183 〕 30,211	〔 15,274 〕 15,557	〔 49.0 〕 51.5	〔 17,922,189 〕 17,942,303 【 5,382,691 】	〔 1,173 〕 1,153	〔 3,400 〕 3,400
Research Activity Start-up(*1)	〔 821 〕 791	〔 821 〕 791	〔 - 〕 -	〔 839,179 〕 830,155 【 249,047 】	〔 1,022 〕 1,050	〔 1,500 〕 1,500
Encouragement of Scientists	〔 3,738 〕 3,796	〔 700 〕 707	〔 18.7 〕 18.6	〔 350,000 〕 349,900	〔 500 〕 495	〔 900 〕 800
Publication of Scientific Research Results	〔 1,084 〕 1,006	〔 560 〕 536	〔 51.7 〕 53.3	〔 1,280,990 〕 1,166,960	〔 2,287 〕 2,177	〔 26,900 〕 20,000
Creative Scientific Research(*6)	〔 18 〕 -	〔 18 〕 -	〔 - 〕 -	〔 1,208,300 〕 - 【 - 】	〔 67,128 〕 -	〔 89,500 〕 -
Total	〔 128,505 〕 131,330	〔 63,888 〕 68,497	〔 49.7 〕 52.2	〔 151,702,407 〕 156,179,852 【 46,134,148 】	〔 2,375 〕 2,280	〔 213,000 〕 159,200

Notes:
1.This chart combines the figures for newly selected and continuing projects.
2. The figures in 〔 〕indicate the previous fiscal year.
3. The figures in【 】indicate indirect costs (excluded from the total).
4. (*1) Only continued projects have been accounted for.
5. (*2) Only new projects and continued projects of continued area have been accounted for.
6. (*3) No new projects are recruited in FY 2012.
7. (*4) Among these projects, there are new project that are partially covered under the multi-year Fund; their columns “Amount allocated” and “Amount allocated per project” are calculated based on the projects’ initial plans for FY 2012.
8. (*5) Among these projects, there are new project covered under the multi-year Fund; their columns “Amount allocated” and “Amount allocated per project” are calculated based on the projects’ initial plans for FY 2012.
9. (*6) No new or continuing projects are recruited in FY 2012.
10. "Scientific Research on Innovative Areas (Research in a proposed research area) 'Support Activity in 3 Areas of Bioscience"', "Grant-in-Aid for Special Purposes" and "Special Grant-in-Aid for Encouragement of Scientists" are excluded.

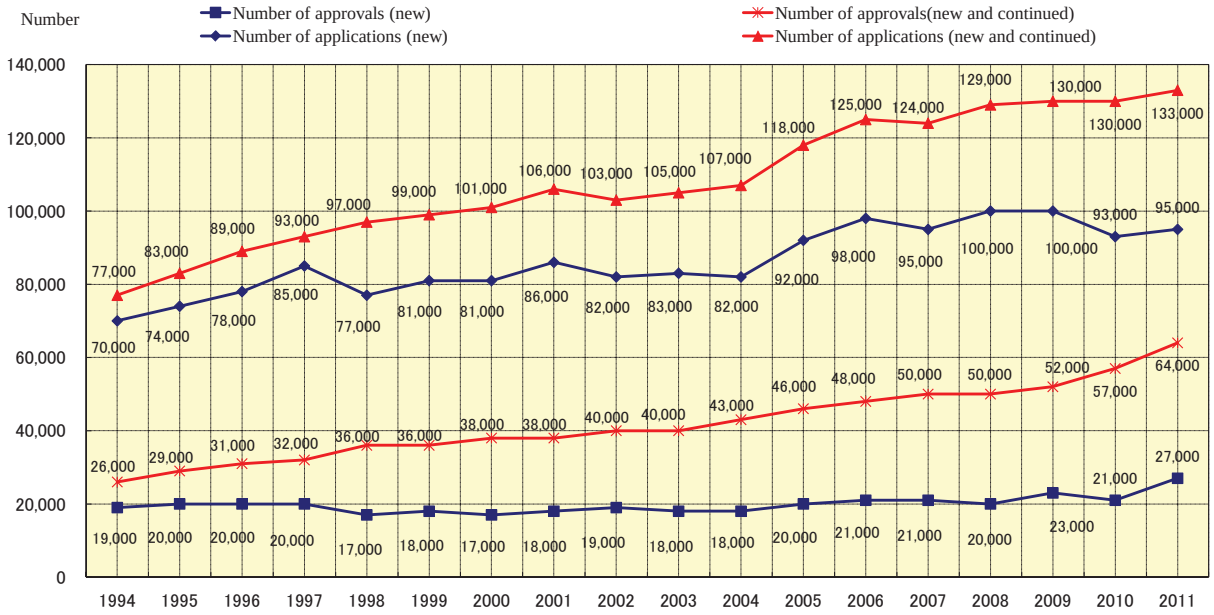
2. Changes in Budgets and Other Information

○ Changes in budgets and other information



FY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Budget (¥ hundreds of millions)	824	924	1,018	1,122	1,179	1,314	1,419	1,580	1,703	1,765	1,830	1,880	1,895	1,913	1,932	1,970	2,000	2,633	2,566
Year-on-year increase (%)	12.0	12.1	10.2	10.2	5.1	11.5	8.0	11.3	7.8	3.6	3.7	2.7	0.8	0.9	1.0	2.0	1.5	31.7	−2.5
Amount disbursed (¥ hundreds of millions)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2,204	2,307
Year-on-year increase (%)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4.7

○ State of applications and approvals



○ Approval rate

(Upper column: New projects, Lower column: New and continuing projects)

FY	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Approval rate (%)	27.0	27.6	26.1	24.6	22.2	21.8	21.6	21.1	22.7	21.4	22.5	21.6	21.5	22.2	20.3	22.5	22.1	28.1
Approval rate (%)	33.8	35.2	35.1	34.0	37.6	36.1	37.3	35.8	38.5	37.9	40.7	38.6	38.6	40.4	38.4	40.3	44.2	48.4

Inquiries

1. Inquiries about the invitation of applications should be directed to the following divisions through the research institution.

(1) About the invitation of applications:

Research Aid Division I, Research Program Department, Japan Society for the Promotion of Science

Phone: 03-3263-4682,4798,1878,0964,4764,4796

KAKENHI (Series of Single-year Grants): Specially Promoted Research, Scientific research(S), Grant-in-Aid for Young Scientists (S)

Research Aid Division II, Research Program Department, Japan Society for the Promotion of Science

Phone: 03-3263-4254 (Specially Promoted Research)
03-3263-4388 (Scientific Research (S) **,** Grant-in-Aid for Young Scientists (S))

KAKENHI (Series of Single-year Grants): S**cientific research (A),** all research projects, S**cientific research (B), Grant-in-Aid for Young Scientists (A)** projects adopted in FY2011 or before, **Scientific research (C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (B)** projects adopted in FY2010 or before

Research Aid Division I, Research Program Department, Japan Society for the Promotion of Science

Phone: 03-3263-4779,4758,0996,4724

KAKENHI (Multi-year Fund): Scientific research (C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (B) projects adopted from FY2011 onward

Research Aid Division I, Research Program Department, Japan Society for the Promotion of Science

Phone: 03-3263-1057,1843,1845,0992

KAKENHI (Partial Multi-year Fund): S**cientific research (B), Grant-in-Aid for Young Scientists (A)** projects adopted in FY2012

Research Aid Division I, Research Program Department, Japan Society for the Promotion of Science

Phone: 03-3263-4779,4758,0996,4724

(2) For inquiries concerning the use of the JSPS electronic application system for projects funded by grants-in-aid for scientific research:

Call center: 0120-556-739 (toll-free)
* Available from 9:30 to 17:30 every day except Saturdays, Sundays and holidays

The following phone numbers are also available: 03-3263-1902 and 03-3263-1913
System Management Team, Policy Planning, Information and Systems Division, General Affairs Division, Japan Society for the Promotion of Science

(3) For inquiries concerning the use of the Cross-ministerial Research and Development management system (e-Rad):

e-Rad help desk: 0120-066-877 (toll-free)
* Available from 9:30 to 17:30
* The following phone numbers are also available: 03-5638-5361

(4) For matters related to the "Self-Assessment Checklist on the Improvement of the System and Other Matters", based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)":

Office of Research Funding Administration, Promotion Policy Division, Research Promotion Bureau, the Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Phone: 03-6734-4014

(5) For matters related to "the Life Science Database":

National Bioscience Database Center, Japan Science and Technology Agency (JST)

Phone: 03-5214-5491

2. The application guidelines can be viewed on the JSPS website. Application forms can be downloaded from the following website.

JSPS's website on Grants-in-Aid for Scientific Research
http://www.jsps.go.jp/j-grantsinaid/index.html [Japanese]
http://www.jsps.go.jp/english/e-grants/index.html [English]