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

FY2023

Scientific Research (B/C),
Challenging Research (Pioneering/Exploratory),
and
Early-Career Scientists

This English version is provided for convenience of prospective KAKENHI applicants who experience difficulty in reading the Japanese original, which should be referred to, in case of dispute.

August1, 2022

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

Introduction

This document describes the procedures and other matters relevant to the "Call for Proposals for the Grants-in-Aid for Scientific Research-KAKENHI- for FY2023" including the "Scientific Research (B/C)," the "Challenging Research (Pioneering/Exploratory)," and the "Early-Career Scientists."

The contents are：

"Ⅱ Call for Proposals" provides for each of the research categories, such basic issues as the subjects in the research categories to be called, the range of envisaged total budget, a project period, etc. The schedule from the call for proposals, through the proposal submission and the review, to the grant delivery is also described.

The subsequent sections, "Ⅲ Instructions for Prospective Applicants," "Ⅳ Instructions for Grant Recipients" and "Ⅴ Instructions for Administrative Staff of Research Institution" describe conditions for application, required procedures, and other matters to be followed by the respective actors.

This Call for Proposals is announced prior to the finalization of the national budget for FY2023, so as to let prospective applicants proceed with an early preparation for the review and enable to commence their research activities as soon as possible. It is, therefore, to be reminded that, depending on the situation of the national budget enactment, details on the grant allocation and other matters may be subject to change at a later stage.

The major changes in the FY2023 Call for Proposals are listed on the following pages.

- Grants-in-Aid for Scientific Research is a competitive research funding intended to provide financial support for creative and pioneering research conducted by individual researchers. Therefore, the contents of the Research Proposal Document must be original planned by the applicant.
  In preparing Research Proposal Document, plagiarism and/or misappropriation of the research contents of others are strictly impermissible. Applicants must comply with research ethics.

- The research using the KAKENHI fund should be carried out by the researchers' own initiative and responsibility. Therefore, the implementation of a KAKENHI research project and publication of the research results are solely attributed to the researchers' responsibility and view, and do not reflect that of the funding sector nor of the government.

- To ensure the quality of scientific knowledge and to gain trust of society on scientists and scientific communities, it is essential to exercise fair and conscientious research activities with the adherence to the code of conduct for scientists. Applicants must understand and practice the contents of both the Statement "Code of Conduct for Scientists -Revised Version-" (section I. "Responsibilities of Scientists") by the Science Council of Japan and the booklet "For the Sound Development of Science - The Attitude of a Conscientious Scientist -" (especially section I "What Is a Responsible Research Activity?") issued by the Japan Society for the Promotion of Science (JSPS).

< Major Changes in the Call for Proposals for Fiscal Year 2023 >

(1) Changes in schedule for the Call for Proposals

○The schedule for the call for proposals for FY 2023 Transformative Research Areas (A/B) has been changed to earlier dates as shown below. For other research categories, there are no planned changes to the FY2022 schedule for call for proposals. (See page 17)

○Schedule for FY2023 Call for Proposals and Notice of Review Results for Transformative Research Areas (A/B) (Tentative)

Research Category	Start of Call for Proposals	Deadline for Submission of Applications	Timing of Notice of Review Results
Transformative Research Areas (A)	May 23, 2022 (August 20, 2021)	July 19, 2022 (October 18, 2021)	Late February 2023 (June 16, 2022)
Transformative Research Areas (B)	May 23, 2022 (August 20, 2021)	July 19, 2022 (October 18, 2021)	Late February 2023 (May 20, 2022)

* The dates in parenthesis ( ) on the lines below show the FY2022 schedule.

（Reference）Schedule for FY2023 Call for Proposals and Notice of Review Results for Main Research Categories (Tentative)

Research Category	Start of Call for Proposals	Deadline for Submission of Applications	Timing of Notice of Review Results
Specially Promoted Research	July 1, 2022 (July 1, 2021)	September 5, 2022 (September 6, 2021)	Late March 2023 (March 18, 2022)
Scientific Research (S)	July 1, 2022 (July 1, 2021)	September 5, 2022 (September 6, 2021)	Early May 2023 (April 27, 2022)
Scientific Research (A)	July 1, 2022 (July 1, 2021)	September 5, 2022 (September 6, 2021)	Late February 2023 (February 28, 2022)
Scientific Research (B/C), Early-Career Scientists	August 1, 2022 (August 1, 2021)	October 5, 2022 (October 6, 2021)	Late February 2023 (February 28, 2022)
Challenging Research (Pioneering/Exploratory)	August 1, 2022 (August 1, 2021)	October 5, 2022 (October 6, 2021)	Late June 2023 (June 30, 2022)

* The dates in parenthesis ( ) on the lines below show the FY2022 schedule.

○Applicants should take note that in connection with the forward shifting of the Call for Proposals, the deadlines for the submission of applications have also been brought forward. (See page 17)

○The timing of the Call for Proposals for some research categories subject to the restriction on parallel grant application/receipt may vary. Applicants should check the "Table of Restriction on Parallel Grant Application/Receipt" carefully. In a case for which the restriction on parallel grant application/receipt applies, applicants are not eligible to submit a new application for the other research category even if he/she withdraws the research project that he/she had already submitted (sent) through the electronic application system. (See page 40)

(Reference) MEXT and JSPS plan to further bring forward the schedule for the FY2024 Call for Proposals for Specially Promoted Research and Scientific Research (S) to start in April 2023.

(2) Revisions, etc. to the Review Section Table

○The Review Section Table which will be applicable starting from the Call for Proposals for the Grants-in-Aid for Scientific Research-KAKENHI- for FY2023 has been revised. For details, please refer to the MEXT website. (See page 28, 99, 155)
https://www.mext.go.jp/content/20220318-mxt_gakjokik-000021232.pdf

[Key points of the revision]

- The examples of related research content of the Basic Sections have been changed.
  (While maintaining the current classification of Basic, Medium-sized, and Broad review sections, the examples of related research content offered for the Basic Sections have been revised)

- Joint reviews will be conducted for several Basic Sections under Grant-in-Aid for Scientific Research (B).
  (For Grant-in-Aid for Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections for which the number of applications is notably small)

(3) Relaxation of Restrictions on Parallel Grant Application/Receipt applicable to Early-Career Scientists (Second Time) and Challenging Research (Pioneering)

○Starting from the FY2023 Call for Proposals, restrictions on parallel submission of research proposals and receipt of grants between Early-Career Scientists (Second Time) and Challenging Research (Pioneering) will be relaxed in order to further enhance support for early-career scientists. (See page 25, 48)

(4) Notice of Review Results of Preliminary Screening for Challenging Research

○Starting from the FY2023 Call for Proposals, JSPS will notify the review results of the preliminary screening for Challenging Research (Pioneering/Exploratory) to the Principal Investigators and their research institutions whose research proposals were not adopted. Notification will be made through the electronic application system after the review of preliminary screening is completed. (See page 29)

(5) Changes to the application requirements for Grant-in-Aid for Research Activity Start-up

○ The application requirements for FY2023 Grant-in-Aid for Research Activity Start-up will be changed. Applicants must fall under either A) or B) below. (See page 36 and the FY2023 Application Procedures for this research category (Call for Proposals is scheduled to start in early March 2023))

A) An individual who obtains eligibility for KAKENHI application on or after October 1, 2022, and has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS.

B) An individual who has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS because he/she was on maternity leave or childcare leave in FY2022.

(*) FY2023 Grants-in-Aid for Specially Promoted Research, Transformative Research Areas,

Scientific Research, Challenging Research, and Early-Career Scientists

(6) Research Integrity

○In response to the "Policy for Securement of Research Integrity" (April 27, 2021, Decision of Council for Science, Technology and Innovation), JSPS is taking necessary measures to ensure the transparency of research activities. (See page 7, 84)

As an ongoing measure, applicants will be required to provide information to ensure the transparency of research activities in their Research Proposal Documents for the FY2023 Call for Proposals.

Note that MEXT and JSPS are planning to upgrade its systems so that such information registered in e-Rad will be reflected in the KAKENHI Electronic Application System starting from the FY2024 Call for Proposals.

(Key Actions)

- It is explicitly stated that applicants must declare not only acquisition of other domestic competitive research funding but also any foreign research funding in "The Status of Application and Acquisition of Research Grants" column in the Research Proposal Document.
- Applicants must enter the affiliated institution and position in applying for and acquiring research grants for the research project entered in "The Status of Application and Acquisition of Research Grants" column in the Research Proposal Document.
- Research Proposal Documents should be submitted after appropriately sharing with their affiliated research institutions, the information necessary to ensure the transparency of all research activities that the applicant is engaged in. If the applicant plans to handle any technology regulated by the Foreign Exchange and Foreign Trade Act of Japan (Act No. 228 of 1949), he/she must abide by said Act and the rules, etc. of his/her affiliated research institution, and thoroughly check the security export control system and how to handle such technology prior to submitting the Research Proposal Document.

Note that untruthful statement or misrepresentation in the Research Proposal Document may result in cancellation or reduction of the research grant.

(7) Participation in the KAKENHI Peer-review Process

○It is re-emphasized that positive acceptance of invitation to serve as KAKENHI reviewer is the responsibility of researchers. Supporting the peer-review system of KAKENHI by the whole body of researchers by appropriate sharing of the burden of proposal review is crucial in sustaining the scientific research. (See page 70)

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[References]

The application forms (Research Proposal Document) and other application materials are contained in separate files. Please refer to "Supplementary edition to the Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- for FY2023; Scientific Research (B/C), Challenging Research (Pioneering/Exploratory), and Early-Career Scientists (Forms/Procedures for Preparing and Entering a Research Proposal Document)".

* The application forms (Research Proposal Document) and other application materials can be downloaded from the JSPS website (cf. URL below).

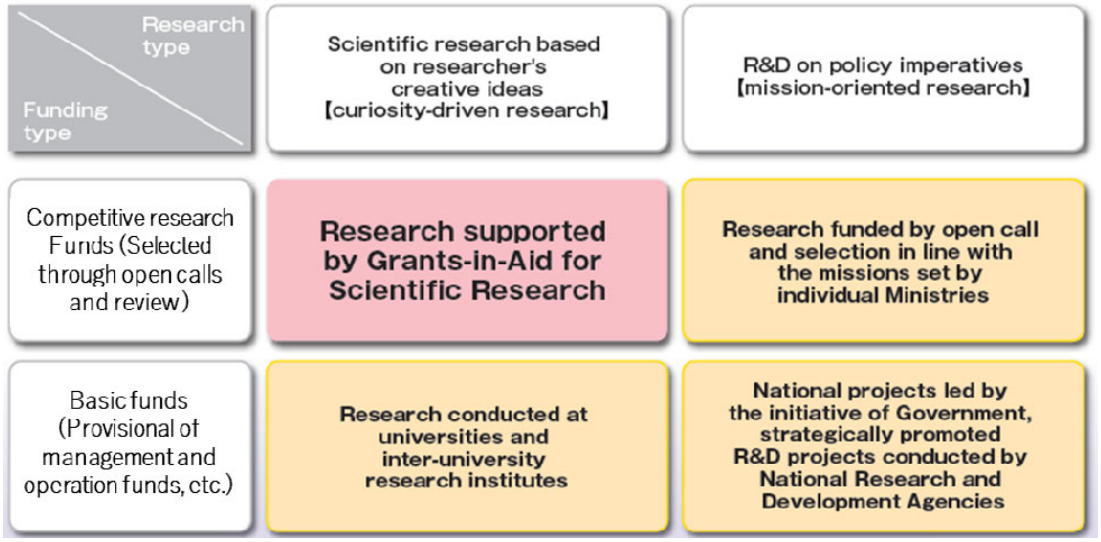
URL: https://www.jsps.go.jp/english/e-grants/grants09.html

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 (hereinafter referred to as "KAKENHI") are competitive research funds that are intended to promote development of scientific research (based on original ideas of researchers), encompassing basic to applied researches in all fields ranging from humanities and social sciences to 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 by peer-review process.

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



2. Research Categories

Different research categories of KAKENHI listed below are provided so as to meet the variety of the research content and budget scale.

❖ As of August 2022

Research categories	Purposes and description of each research category	Type of fund*1
Grants-in-Aid for Scientific Research		
Grant-in-Aid for Specially Promoted Research	Outstanding and distinctive research conducted by one or a relatively small number of researchers expected to achieve remarkably excellent research results that opens up a new scientific field. The research period is 3 to 5 years. (In a truly necessary case, period up to 7 years is acceptable.) The budget ranges from 200 million to 500 million yen per project (Only in a truly necessary case, budget exceeding 500 million yen is asked for.).	SG
Grant-in-Aid for Scientific Research on Innovative Areas (Research in a Proposed Research Area)	This category is intended to foster novel research areas proposed by diverse groups of researchers that are expected to lead to development and heightening of Japan's research level in the respective fields, to be conducted by collective research efforts through collaboration, scholarly training, shared use of equipment, etc. The period is 5 years. The budget range is generally set between 10 million to 300 million yen per fiscal year per proposed area. [A call for proposals for budget for collecting research results of Finished Research Area only is put out in FY2023 and beyond.]	SG

Grant-in-Aid for Transformative Research Area	(A) Research areas proposed through co-creative and interdisciplinary efforts of diverse researchers, which aim to create research areas that will lead the way to radical transformation of and change in the existing framework and/or direction of research as well as upgrade and level-up of scientific research in Japan and nurturing young researchers, and will contribute to the development of the proposed research areas through efforts for joint research and shared use of equipment, etc. (5 years; more than 50 million yen and up to 300 million yen per fiscal year per research area (In a truly necessary case, a budget exceeding 300 million yen may be requested.)) (B) Research areas proposed by compact groups of researchers who will be bearers of the next generation of research with a smaller budget scale (about 3 or 4 groups), which aim to create research areas that will lead the way to radical transformation of and change in the existing framework and/or direction of research as well as upgrade and level-up of scientific research in Japan through more challenging and exploratory research, and expected to lead to the Transformative Research Areas (A) in the future. (3 years; 50 million yen or less per fiscal year per research area)	SG	
Grant-in-Aid for Scientific Research	(S): Creative/pioneering research conducted by one or a relatively small number of researchers. 5 years (in principle) 50 million to 200 million yen (A), (B), (C): Creative/pioneering research conducted by one researcher or jointly by multiple researchers. (A) 3 to 5 years; 20 million to 50 million yen (B) 3 to 5 years: 5 million to 20 million yen (C) 3 to 5 years; 5 million yen or less	(S)	SG
		(A)	
		(B)	
		(C)	MF
Grant-in-Aid for Challenging Research (Pioneering/Exploratory)	Research conducted by a single or multiple researchers that aims at radically transforming the existing research framework and/or changing the research direction and has a potential of rapid development. The scope of the (Exploratory) category encompasses research proposals that are highly exploratory and/or are in their budding stages. (Pioneering) 3 to 6 years; 5 million to 20 million yen (Exploratory) 2 to 3 years; 5 million yen or less	MF	
Grant-in-Aid for Early-Career Scientists	Research conducted by an individual researcher (*2) who is less than 8 years after Ph.D. acquisition. 2 to 5 years; 5 million yen or less	MF	
Grant-in-Aid for Research Activity Start-up	Research conducted by a single researcher who has been freshly appointed to a research position, or who has returned from his/her maternity, childcare or other kinds of leave. Up to2 years; Up to 1.5 million per fiscal year	MF	
Grant-in-Aid for Encouragement of Scientists	Research conducted by an individual who is ineligible for application for other KAKENHI categories (e.g., individuals who belong to educational or research institutions, private companies, etc. and engage in the researches to contribute to the promotion of the science). 1 year; 100 thousand to 1 million yen	SG	
Grant-in-Aid for Special Purposes	Research projects of pressing urgency and importance.	MF	
Grant-in-Aid for Publication of Scientific Research Results		SG	
Publication of Research Results	Subsidy for publication and/or international dissemination of research achievements of high academic values executed by academic associations and other organizations.		
Enhancement of International Dissemination of Information	Subsidy for efforts by academic societies and other scholarly organizations to strengthen international dissemination of academic information for the purpose of international academic exchange.		
Scientific Literature	Subsidy for academic publication of research results (books) authored by an individual or a group of researchers.		
Databases	Subsidy for creation and operation of a database open to public use by an individual or a group of researchers.		
Grant-in-Aid for JSPS Fellows	Funding period is up to 3 years for research conducted by JSPS Fellows (including Foreign JSPS Fellows). As for Cross-border Postdoctoral Fellowship (CDP) the period is up to 5 years	SG	

Fund for the Promotion of Joint International Research		MF
International Leading Research	This grant aims to enable research groups led by top-level researchers in our country to play a central role in the international network, thereby achieving research results of high scientific value internationally. With the participation of postdoctoral fellows and graduate students, the grant seeks to foster researchers who can play leading roles in the international research community in the future. (7 years (extendable up to 10 years); up to 500 million yen)	
Fostering Joint International Research	(A) Support of joint international research project conducted by a KAKENHI grantee in collaboration with researcher(s) at a foreign university or a research institution over a period of 6 to 12 months. The grant seeks to markedly advance research plans for the root research project and to foster independent researchers who can be internationally competitive. (The budget is up to 12 million yen.) [The category name is changed from FY2018 call for proposals.] (B) Support of joint international research project conducted by multiple domestic researchers and a researcher who belongs to overseas research institution. In addition to the development of scientific research, the grant seeks to build out infrastructure of joint international research or further strengthen joint international research and to foster researchers who can be internationally competitive. (The period is 3 to 6 years. The budget is up to 20 million yen.)	
International Activities Supporting Group	Support of international activities within Scientific Research on Innovative Areas. (Set period of the Area, up to 15 million yen per fiscal year) [After FY2018 call for proposals "International Activities Supporting Group" has been incorporated into "Grant-in-Aid for Scientific Research on Innovative Areas "Administrative Group." (It continued until the FY2019 call for proposals.)]	
Home-Returning Researcher Development Research	Support of research to be conducted by a Japanese researcher with current affiliation abroad who is to be newly appointed at university or research institution in Japan. (The period is up to 3 years. The budget is up to 50 million yen.)	

*1 SG: Series of Single-year Grants, MF: Multi-year Fund

*2 Individuals who are in the prospect of acquiring Ph.D. are also eligible. When counting the years after Ph.D. acquisition, the period of maternity leave and childcare leave can be excluded.

3. Role Sharing Between MEXT and JSPS

Up to FY 1998, all aspects of KAKENHI funding were handled by the Ministry of Education (the predecessor of MEXT). From FY1999 on, these tasks have been gradually transferred to JSPS. The current role-sharing between MEXT and JSPS is as shown below.

❖ As of August 2022

Research category	**Call for proposals, Review** Preparation of the document(s) for procedures, Reception of proposal submission	**Grant delivery** Notifications of unofficial decision Reception of the application form (after unofficial decision) and other documents for the relevant procedures. Notification of grant decision
Scientific Research on Innovative Areas, Transformative Research Areas, Special Purposes, Fund for the Promotion of Joint International Research (International Activities Supporting Group)	MEXT	JSPS
Specially Promoted Research, Scientific Research, Challenging Exploratory Research, Challenging Research, Early-Career Scientists, Research Activity Start-up, Encouragement of Scientists, Publication of Scientific Research Results, JSPS Research Fellow, Fund for the Promotion of Joint International Research (International Leading, Research Fostering Joint International Research, Home-Returning Researcher Development Research)	JSPS	JSPS

4. Rules Pertaining 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), the "Procedures on the Handling of Grants-in-Aid for Scientific Research" (Public Notice of MEXT), the "Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research" (KAKENHI (Series of Single-year Grants)) (Regulations No. 17, 2003), and other rules.

KAKENHI (Multi-year Fund) are governed by the application with modifications of the "Law on Optimizing Implementation of Budgets Relating to Subsidies" (Law No. 179, 1955) and the application of the "Basic Policy on the Management of the KAKENHI (Multi-year Fund) (Decision by the Minister of Education, Culture, Sports, Science and Technology)", the "Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund))" (Rule No. 19, 2011) and other rules.

(1) Three Types of Rules Pertaining to KAKENHI

The following three sets of rules pertain to various aspects of KAKENHI.

i) Application Rules: rules concerning the submission of research proposals

ii) Assessment Rules: rules concerning the pre-assessment (review) of applications, and rules concerning the interim, and other progress assessment of granted projects.

iii) Spending Rules: rules concerning the use of KAKENHI

These three sets of rules apply as follows.

[Grants-in-Aid for Scientific Research]

❖ As of August 2022

	Application Rules	Assessment Rules	Spending Rules
KAKENHI (Series of Single-year Grants)	MEXT Application Procedures	MEXT Rules concerning the assessment for Grants-in-Aid for Scientific Research	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 Application Procedures	JSPS Rules concerning the review and assessment for Grants-in-Aid for Scientific Research ***The assessment rules for FY2023 are scheduled to be made public in August.**	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

(2) Appropriate Use of KAKENHI

KAKENHI are funded by the tax of citizens and other sources, so please ensure that the KAKENHI is used efficiently and effectively, for example through planning for the communal use of purchased items.

Researchers receiving the KAKENHI have a duty to comply with the related laws, regulations and spending rules by researchers (supplementary conditions or funding conditions), and also to use such grants appropriately. To facilitate the appropriate use of KAKENHI, research institutions to which the researchers belong are responsible for the management of KAKENHI. The Administrative work that each research institution is required to carry out (rules for use for institutions) is determined by JSPS. The research institutions are responsible for the appropriate accounting of KAKENHI. It is desirable, for example, to set up an accounting system for proper management of KAKENHI budget and expenditure, purchase order and delivery inspection, and internal auditing. To prevent improper business transactions, it is important, in addition to appropriate delivery inspections, to make all traders thoroughly informed of the KAKENHI rules and thus obtain cooperation of traders in the prevention of this kind of fraudulent accounting. Research institutions should take rigorous measures so as to eliminate business malpractice.

KAKENHI applicants and their research institutions must have full understanding of the KAKENHI rules prior to the submission of their research proposals.

(3) The Distinction between KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)

A research project submitted to the categories of KAKENHI (Series of Single-year Grants), if adopted, is granted as a package plan for the multi-year research period. The actual funding, however, is made on the single-year basis for each fiscal year of the research period. Therefore, this type of KAKENHI cannot be used to cover the expenditures in fiscal years other than the respective grant year.

When it is anticipated that spending of the grant cannot be completed within the fiscal year, owing to reason(s) unforeseeable at the time of grant delivery, the grant can be carried over to the next fiscal year after going through the due procedure. Firstly a Principal Investigator submits an application for carry-forward of grant through his/her affiliated research institution to JSPS. After reviewing it by JSPS and MEXT, the Minister of MEXT makes a request to the Minister of Finance for the carry-forward of grant to obtain his/her approval.

On the other hand, the KAKENHI (Multi-year Fund) is handled as single funding for the whole research period. Therefore, it is possible to use the grant to cover the expenditures extending over fiscal year boundaries.

Moreover, if an amount of grant remains unused by the end of a fiscal year, it can be carried over to the successive fiscal year(s) as long as they are within the overall research period, without going through prior authorization procedures. In case such a grant carry-over becomes necessary in the final year of the research period, the grantee may choose to request an official approval of one-year extension of the research period.

(4) Penalty for Non-submission of "Report on the Research Achievements"

i) The "Report on the Research Achievements" plays the important role in making the achievements of the research funded by the KAKENHI widely known to the public, and thereby returning the outcome of KAKENHI supported by citizens' tax, to the society.

The contents of the "Report on the Research Achievements" submitted by KAKENHI grantees are compiled and made available to the public on the "Grants-in-Aid for Scientific Research Database" (KAKEN) of the National Institute of Informatics and other platforms. "Report on the Research Achievements" should be submitted via the research institution to which the KAKENHI grantees belong.

ii) No KAKENHI grant will be awarded to a researcher who failed to submit the "Report on the Research Achievements" at the end of his/her research period without any justifiable reason.

If such a non-compliance case is uncovered, the decision of grant award to the researcher in question may be cancelled, the on-going grant may be suspended, and return of the delivered grant may be ordered. In addition, relevant information, such as the name of the research institution to which the researcher in question belongs, may be made public.

Furthermore, if researchers have failed to submit the scheduled report on the research

achievements without justifiable reason, then execution of other KAKENHI 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) Penalty for the Case of Infringement of Related Laws and Regulations

If there have been serious falsehoods in the application documents, or violation of relevant laws, regulations and guidelines, the delivery of KAKENHI may be suspended or cancelled.

5. "Guidelines on the Proper Implementation of Competitive Research Funds," etc.

The "Guidelines on the Proper Implementation of Competitive Research Funds" (Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds, September 9, 2005; revised December 17, 2021) states common understandings among the research-related ministries and offices in regard to allocation of competitive research funds, in terms of elimination of such inappropriate practices as unreasonable duplication and/or excessive overconcentration in the grant allocation, fraudulent acquisition and/or unlawful use of grants, and misconducts in research activities. The implementation of the KAKENHI system as well as other competitive research funds scheme follows the above-mentioned "Guidelines" and other related rules. Applicants are urged to take special notice of the following points.

(1) Elimination of Unreasonable Duplication and/or Excessive Overconcentration in the Grant Allocation

i) Towards elimination of "Unreasonable Duplication and/or Excessive Overconcentration" (*) of competitive research funds, relevant information on funding applications are shared among the pertinent ministries and funding agencies, making use of the Cross-ministerial Research and Development management system (e-Rad).

Therefore, applicants, when submitting more than one KAKENHI applications and/or other competitive research funds, are urged to prepare their application documents with due care to clearly state the differences between the project to be submitted and their other projects so as to make it clear that they do not constitute unreasonable duplication.

In case a particular KAKENHI application is recognized as constituting a case of unreasonable duplication and/or excessive overconcentration, that application may not be granted.

ii) The following conducts may result in rejection of the research project, cancellation of grant, or reduction of the research budget: untruthful statement or misrepresentation in any of the entry of the status of applications and acquisitions of other competitive research funds (including those of other ministries) and other grants in the research proposal document (such as name of research grant, title of research project, research period, amount of budget, effort, affiliated

institution/position upon application/acquisition of such grants, etc.); if it is found that the applicant has not appropriately shared with his/her affiliated research institution, the information necessary to ensure the transparency of all research activities that he/she is involved in, including information on research funds and side jobs, etc., as well as information on donations and information on supports other than monetary funds, for example, through the provision of facilities and/or equipment.

iii) Inquiries on the status of acceptance of facilities and/or equipment used for the research, the status of management of such facilities/equipment, and request for other information may be made to researchers, etc.

(*) Elimination of Unreasonable Duplication and Excessive Overconcentration in Grant Allocation

"Guidelines on the Proper Implementation of Competitive Research Funds" -Extract-

(Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds, September 9, 2005; revised December 17, 2021)

2. Elimination of Unreasonable Duplication and/or Excessive Overconcentration in the Grant Allocation

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

i) In the Guidelines, "Unreasonable Duplication" refers to a situation where more than one competitive research fund and other research grants (all current research funds that are allocated to individual research contents, including both domestic and overseas grants-in-aid, subsidies, joint research funds, commissioned research funds, etc.; hereinafter the same) are unnecessarily and redundantly allocated to the same research project (meaning, the name and content of the research to which the competitive research funds are allocated; hereinafter the same) by the same researcher. Any of the following cases fall under "Unreasonable Duplication."

- **Cases where simultaneous applications have been made to more than one competitive research funds / other research funds for substantially the same research project, 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 research funds / other research funds has already been completed.**
- **Cases where there is duplication in the use of research funds among more than one research projects.**
- **Other cases corresponding to those above.**

ii) 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 referred to as "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 falls 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.**

(2) Dealing with "Improper Grant Spending," "Fraudulent Grant Acquisition" or "Research Misconduct"

○ "Improper Grant Spending," "Fraudulent Grant Acquisition" and "Research Misconduct" refer to the following type of acts respectively.

・"Improper Grant Spending":
Use of competitive research funds for other purposes, intentionally or by gross negligence, for example, by conducting fictitious business transactions ("*azukekin*") with a trader through fictitious order placements, or by charging costs higher than actually needed for personnel, travel expenses, etc., or use of competitive research funds in violation of the content of the funding decision or the conditions it implies.

・"Fraudulent Grant Acquisition":
Receiving competitive research funds by deception or other fraudulent means, for example, by applying under the name of another researcher, or by making false entries in application documents.

・"Research Misconduct":
Fabrication, falsification, or plagiarism of data, information, or findings published research achievements based on the intent of the researcher, or the failing of the researcher to fulfill the basic duty of care that he/she has.

(i) **No KAKENHI will be offered, for a fixed period of time, when a researcher or related party has committed an improper grant spending of KAKENHI, has committed a fraudulent grant acquisition of KAKENHI, or has committed a research misconduct.**
Moreover, for research projects for which it is established that an improper grant spending of grants, a fraudulent grant acquisition of grants or research misconduct has been committed, the researcher in question may be required to return the given KAKENHI completely or partially.
Moreover, an outline of the improper grant spending of KAKENHI, the fraudulent grant acquisition of KAKENHI, and/or the research misconduct in question of the researcher who falls in those categories (containing an outline of the outcome of the investigation in the research institution, the names of the people involved, the name of the system, the institution they belong to, the research project, the budget, the fiscal year of the research, the fraudulent content, details of the measures taken, etc.) will be made public.
Also researchers who have committed improper grant spending or fraudulent grant acquisition of competitive research funds other than the KAKENHI (including funds under the jurisdiction of other Offices and Ministries), etc., and/or has committed research misconduct by means of these competitive research funds, and therefore are excluded from receiving these funds in question for a certain period of time, will not receive the KAKENHI for the same period of time.

Note: This applies to those schemes newly starting a call for proposals in FY2023 (and onward) for "competitive research funds other than KAKENHI, etc. (including funds under the jurisdiction of other Offices and Ministries)" as well. It also applies to those schemes that ended before FY2022. Refer to the website below for the schemes to which this specifically applies at present.
URL: https://www8.cao.go.jp/cstp/compefund/kyoukin_r3-4.pdf

○Period of KAKENHI suspension

[Improper Grant Spending and Fraudulent Grant Acquisition of KAKENHI]

<table>
<tr><th>Researcher categories</th><th colspan="2">Extent of the improper grant spending</th><th>Period of KAKENHI suspension</th></tr>
<tr><td>I. Researchers who committed improper grant spending of KAKENHI and researchers who conspired in such acts</td><td colspan="2">1. Misappropriation of KAKENHI for personal gain</td><td>10 years</td></tr>
<tr><td rowspan="3">II. Researchers who committed improper grant spending of KAKENHI and researchers who conspired in such acts</td><td rowspan="3">2. Other than 1.</td><td>(i) Impact of the misconduct on the society is substantial and maliciousness of the misconduct is judged to be high</td><td>5 years</td></tr>
<tr><td>(ii) Cases other than (i) and (iii)</td><td>2 to 4 years</td></tr>
<tr><td>(iii) The impact of the misconduct on the society is small and the maliciousness of the misconduct is judged to be low</td><td>1 year</td></tr>
<tr><td>III. Researchers who acquired KAKENHI by deception or other fraudulent means and researchers who conspired in such acts</td><td colspan="2">－</td><td>5 years</td></tr>
<tr><td>IV. Researchers who were not directly involved in the improper grant spending of KAKENHI, but failed to exercise due care and used the funds as a result.</td><td colspan="2">－</td><td>The upper limit is 2 years and the lower limit is 1 year depending on the degree of the breach of duty by the researchers who have the duty of care as a good manager. .</td></tr>
</table>

For cases judged as subcritical to the punitive suspension measures, sharp reprimand is administered to the individual(s) concerned.

The following cases are pertinent to the “sharp reprimand” penalty.

1. Among the case II above, the researchers in case that the influence on society and the maliciousness of their conducts are judged to be insignificant and the amount of money involved is small.
2. Among the case IV above, the researchers in case that the influence on society and the maliciousness of their conducts are judged to be insignificant.

[Research Misconduct]

<table>
<tr><th colspan="3">Individual Involvement in the Misconducts</th><th>Negative Impacts on Science and on Public at Large Degree of Maliciousness</th><th>Period of KAKENHI Suspension</th></tr>
<tr><td rowspan="4">Subject of Research Misconduct</td><td colspan="2">(a) Particularly malicious individual(s) who, for example, had intention of research misconduct from the very beginning of the research</td><td></td><td>10 years</td></tr>
<tr><td rowspan="3">(b) Author(s) of paper(s), etc. related to the research in which research misconduct (s) have been identified (other than (a) above)</td><td rowspan="2">Responsible author(s) of the paper(s) in question (corresponding author, lead author or other authors bearing equivalent responsibilities)</td><td>Cases where it is judged that the impact on the progress of the science in the field in question and the social impact are major, or the level of maliciousness involved in the acts is high</td><td>5 to 7 years</td></tr>
<tr><td>Cases where it is judged that the impact on the progress of the science in the field in question and the social impact are minor, or the level of maliciousness involved in the acts is low</td><td>3 to 5 years</td></tr>
<tr><td>Author(s) of the paper(s) in question other than the responsible author(s) described above</td><td></td><td>2 to 3 years</td></tr>
<tr><td colspan="2">(c) Individual(s) involved who are not the authors of the research paper(s) for which research misconduct(s) are identified.</td><td></td><td>2 to 3 years</td></tr>
<tr><td colspan="3" rowspan="2">Responsible author(s) of paper(s), (corresponding author, lead author or other authors bearing equivalent responsibilities) for which research misconduct(s) are identified, but not involved in the alleged research misconduct</td><td>Cases where it is judged that the impact on the progress of the science in the field in question and the social impact are major, or the level of maliciousness involved in the acts is high</td><td>2 to 3 years</td></tr>
<tr><td>Cases where it is judged that the impact on the progress of the science in the field in question and the social impact are low, or the degree of severity of the acts is low</td><td>1 to 2 years</td></tr>
</table>

* In cases where specific issues for extenuation such as voluntary withdrawal of the paper in question may be taken into account, the suspension period can be shortened as judged fit.

(ii) The relevant information of each research misconduct case may be provided to the offices of the research funding agencies (including Incorporated Administrative Agencies) under the jurisdiction of the relevant Office. Thereby the penalized researcher may be also subject to restriction in application of and/or participation to research projects in other competitive research funds other than KAKENHI.

Note: "Application and/or participation" means proposing new research projects, applying, responding to call for proposals, newly participating to research as a person involved in collective research, etc. and participating as a Principal Investigator or a person involved in collective research, etc. in research projects in progress (continued research projects).

(iii) Research institutions are required to comply with the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards) (revised in February 1, 2021), Ordered by the Minister of Education, Culture, Sports, Science and Technology" and the "Guidelines for Responding to Research Misconduct (adopted August 26, 2014 by MEXT)." Therefore, research institutions should pay adequate attention to these two sets of Guidelines when researchers implement their research activities.

In case where the status of the system improvement in line with these guidelines is recognized inadequate based on the survey results, the measures such as the reduction in indirect cost of

all kinds of grants disbursed by MEXT or the Incorporated Administrative Agencies under the control of MEXT to the research institution(s) in question can be taken.

○ "Guidelines on the Management and Audit of Public Research Funds at Research Institutions"
URL:https://www.mext.go.jp/a_menu/kansa/houkoku/1343904_21.htm

○ "Guidelines for Responding to Research Misconduct"
URL: https://www.mext.go.jp/a_menu/jinzai/fusei/index.htm

Note: Examples of improper grant spending, fraudulent grant acquisition and research misconduct of KAKENHI.

○ Improper grant spending
- **Someone instructed a trader to forge fictitious transaction pretending to have purchased expendables, made the university pay a KAKENHI for them, and then instructed the trader to keep the money as deposit for future use.**
- **Someone instructed a trader to forge a fictitious transaction, obtaining a false invoice which carries item names different from those actually ordered and delivered, and then made the university pay a KAKENHI for them.**
- **Someone instructed his/her students to submit false work attendance sheets, made the university pay a KAKENHI for them, and then kept the money as a pooled fund of his/her lab.**
- **Someone visited destination not listed on the oversea travel itinerary, in order to have a meeting on cooperative research unrelated to the purpose of the KAKENHI research project.**

(Note) The expenditure of the KAKENHI for fictitious and other transactions, like the ones mentioned in the case examples above, are all considered "misappropriation or misuse," even if the expenditure was intended for the purpose of conducting the KAKENHI research project.

○ Fraudulent grant acquisition
- **A researcher ineligible for the KAKENHI funding made application and acquired a KAKENHI grant.**

○ Research misconduct
- **Someone manipulated or forged experimental data or figures in a research paper published as an achievement of the research supported by a KAKENHI.**
- **Someone published books of his/her achievement with KAKENHI which contained an article translated from an original English research paper with no prior consent from the author(s) nor proper quotation statement.**

6. Dissemination, Etc. of Research Achievements Supported by KAKENHI

KAKENHI research achievements are made available to other researchers and to the general public, through posting of the "Research Outline" and the "Report on the Research Achievements" on the Grants-in-Aid for Scientific Research Database (KAKEN) operated by the National Institute of Informatics.

To promote dissemination of research achievements, the KAKENHI can be used to cover such outreach-related expenses as preparation of website or printing of pamphlets. The KAKENHI grantees are urged to actively pursue public promotion of their research achievements through the aid of KAKENHI so as to make them widely known to the public at large.

In this connection, the KAKENHI grantees are encouraged to participate in the "HIRAMEKI ☆ TOKIMEKI SCIENCE" program, in which the latest science developments are presented to elementary, junior high and high school students in an easy-to-understand style.

In addition, please take note of the following issues as well.

(1) The acknowledgement for KAKENHI grant in research publications

When publishing research achievements of the KAKENHI project, researchers should be sure to express that the project has been supported by the KAKENHI grant, by stating in the "Acknowledgment" or other designated section of the paper the "JSPS KAKENHI Grant Number JP8 digits" in the case of English publication or "JSPS 科研費　JP8 桁の課題番号" in the case of Japanese publication.

〈Example〉
【English】This work was supported by JSPS KAKENHI Grant Number JP12K34567.
【Japanese】本研究は JSPS 科研費 JP12K34567 の助成を受けたものです。

(2) The implementation of the fair and conscientious research activities

The research using the KAKENHI should be carried out based on researcher's own self-awareness and responsibility. Therefore the publication on the implementation of the research or research achievements, etc. should not come from the government request and the views and responsibilities on the research achievements should be attributed to the researchers themselves.

On the occasion such as researchers release the research achievements using the KAKENHI broadly to the public, the examples of the indication noting that the research achievements are based on the personal views are given below.

〈Example〉
【English】Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the author's(s') organization, JSPS nor MEXT.
【Japanese】本研究の成果は著者自らの見解等に基づくものであり、所属研究機関、資金配分機関及び国の見解等を反映するものではありません。

(3) Promotion of "Open Access" to the research papers supported by KAKENHI grants

JSPS endorses general policy of promotion of open access of publications of research results funded by public grants including KAKENHI. Note that open access is not mandatory if there are justifiable reasons for deferral such as copyright-related issues, or insufficient repository infrastructure at the research institution.

○Implementation policy on the promotion of open access of publications of JSPS projects:
URL: https://www.jsps.go.jp/data/Open_access.pdf

[Reference 1: What is "Open Access"]

"Open Access" refers to the idea that research papers published in peer-reviewed journals, etc. should be made freely accessible by anyone on line.

[Reference 2: Different Routes to Open Access]

There are three main ways of open access implementation ((i) to (iii) below).

(i) A way in which the article published in the conventional subscription fee type academic journal after a certain period (Embargo)(*1) (for example 6 months later) is made open access by opening the final manuscript to an Institutional Repository(*2) established by the research

institution to which the author belongs, or by opening the final manuscript to the website, etc. established by the researchers (self-archiving)(*3).

(ii) A way to make the article open access by posting the article on the web established by the research community or public institution.

(iii) A way to make the article open access immediately by paying the publication fee (APC: Article Processing Charge) by the author of the article.

*1: Embargo
The predetermined period from the time of publication of an article in an academic journal to the time of release so that it can be posted on an online open access archiving system (repository).

*2: Institutional Repository
An online archiving system created by university or research institution for storage and dissemination of the intellectual products. Institutional repositories play important roles in the reform of academic information distribution by enabling the researchers register their own articles, such as the transmission of research and education achievements of the research institution, PR for both the research institution and the researcher, guaranteeing the accountability of research and education activities towards society, and the long-term conservation of intellectual products.

*3: Self-archiving
”Self-archiving” refers to online posting of articles published in academic journals, dissertations, or data by those other than the publisher (the researcher or research institution) generally on their institutional repositories.

(4) Management of Research Data

As to the management and utilization of research data obtained through the implementation of research activities, in order to secure the autonomy of Japan’s research and development activities and promote international open science, policies such as the Sixth Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021) and Basic Policies on the Management and Utilization of Research Data Created by Publicly-Funded Research Activities (April 27, 2021, Decision of Council for Science, Technology and Innovation) call for initiatives towards strategic storage and management of research data as well as broader utilization of the research results.

Therefore, there is a plan in which, starting from the FY2024 KAKENHI call for proposals, upon formal application for grant delivery, the Principal Investigator of an adopted research project will be asked to formulate a Data Management Plan (“DMP”) outlining the storage and management, etc. of research results and research data of his/her research project.

○ The Sixth Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021) P.58-61
URL: https://www8.cao.go.jp/cstp/kihonkeikaku/6honbun.pdf

○ Basic Policies on the Management and Utilization of Research Data Created by Publicly-Funded Research Activities (April 27, 2021, Decision of Council for Science, Technology and Innovation)
URL: https://www8.cao.go.jp/cstp/tyousakai/kokusaiopen/sanko1.pdf

7. Code of Conduct for Scientists to Adhere

To ensure the quality of scientific knowledge and to gain trust of society on scientists and scientific communities, it is essential to exercise fair and conscientious research activities with the adherence to the code of conduct for scientists. Applicants must understand and practice the contents of both the Statement "Code of Conduct for Scientists -Revised Version-" (section I. "Responsibilities of Scientists") by the Science Council of Japan and the booklet "For the Sound Development of Science -The Attitude of a Conscientious Scientist-" (especially section I "What Is a Responsible Research Activity?") issued by JSPS.

And also take note that upon the formal application for grant delivery, it shall be confirmed through the electronic application system whether the Principal Investigator and Co-Investigator(s) will have taken the research ethics education coursework, etc. (see page 68)

[Extraction from the Statement "Code of Conduct for Scientists -Revised Version-" by the Science Council of Japan dated January 25, 2013]

I. Responsibilities of Scientists

(Basic Responsibilities of Scientists)

1 Scientists shall recognize that they are responsible for assuring the quality of the specialized knowledge and skills that they themselves create, and for using their expert knowledge, skills and experience to contribute to the health and welfare of humankind, the safety and security of society and the sustainability of the global environment.

(Attitude of Scientists)

2 Scientists shall always make judgments and act with honesty and integrity, endeavoring to maintain and improve their own expertise, abilities and skills, and shall make the utmost effort to scientifically and objectively demonstrate the accuracy and validity of the knowledge they create through scientific research.

(Scientists in Society)

3 Scientists shall recognize that scientific autonomy is upheld by public trust and the mandate of the people, understand the relationships between science, technology, society, and the natural environment from a wide-ranging perspective, and act in an appropriate manner.

(Research that Answers to Social Wishes)

4 Scientists shall recognize that they are responsible for answering to the wishes of society to investigate into truths and to achieve various issues. When using research funds that are to be provided for establishing the research environment and for conducting research scientists shall always recognize that such broad social expectations exist.

(Accountability and Disclosure)

5 Scientists shall strive to disclose and actively explain the roles and significance of their own research, evaluate the possible effects of their research on people, society and the environment as well as the changes that their research might engender, neutrally and objectively disclose the results of this evaluation, and build a constructive dialogue with society.

(Dual Use of Scientific Research Outcomes)

6 Scientists shall recognize that there exist possibilities that their research results, contrary to their own intentions, may be used for destructive actions, and shall select appropriate means and methods as allowed by society in conducting research and publicizing the results.

* URL: http://www.scj.go.jp/ja/scj/kihan/

["For the Sound Development of Science – The Attitude of a Conscientious Scientist –" by JSPS]

(Japanese version (text version)) ("For the Sound Development of Science" Editorial Committee on JSPS)

* URL: https://www.jsps.go.jp/j-kousei/data/rinri.pdf

II. Call for Proposals

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

JSPS is organizing a call for proposals for the following research categories.

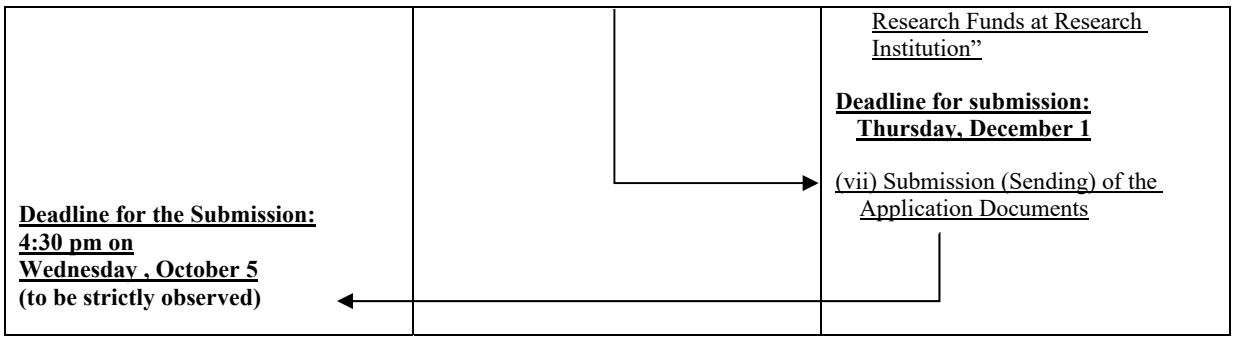
Scientific Research (B/C), Challenging Research (Pioneering/Exploratory), and Early-Career Scientists

2. Schedule from Application to Grant Delivery

(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 for Prospective Applicants" and "IV. Instructions for Grant Recipients")	**Procedures to be Performed by the Research Institution** (See "V. Instructions for Administrative Staff of Research Institution")
Start of Call for Proposals: Monday, August 1, 2022		[Procedures to be completed, if the need arises] (i) The Research Institution obtains an ID and 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 up to 2 weeks. (ii) Registration of the Researcher Information in e-Rad and other matters. (iii) Research institution issues an ID and password to the Principal Investigator. (This does not apply if the researcher already obtained an ID and a password.)
	(i)Preparing the Application The Principal Investigator should access the Electronic Application System using the ID and the e-Rad password which has been provided by the research institution and preparing the application.	
	[Procedures to be completed, if the need arises] (ii) Participation process of a Co-Investigator-to-be joining as a project member	[Procedures to be completed, if the need arises] (iv) The institution gives a consent for the researcher who belongs to it to become a Co-Investigator.
	(iii) 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 set by the research institution.	(v) Submission of the "Checklist Pertaining to the Current Status" based on the "Guidelines for Responding to Misconduct in Research" **Deadline for submission: Friday, September 30** (vi) Submission of the "Self-Assessment Checklist on the Improvement of the System" based on the "Guidelines on the Management and Audit of Public



Notes:

1. After the Principal Investigator submits (sends) the application documents to the research institution (mentioned in "Procedures to be Performed by the Principal Investigator" (iii)), the research institution should submit (send) to JSPS the application documents by the deadline for the submission (mentioned in "Procedures to be Performed by the Research Institution" (vii)).
   Next, the Principal Investigator should verify the section "Preparing the Application and Submitting the Application" (pages 54-67), 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 administrative staff in charge in the research institution.

2. When a researcher is applying for KAKENHI, he/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 administrative staff in charge in the research institution.

3. The research institution should submit a "Self-Assessment Checklist on the Improvement of the System" based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" and a "Checklist Pertaining to the Current Status" based on "Guidelines for Responding to Misconduct in Research" (mentioned in "Procedures to be Performed by the Research Institution" (v) and (vi)). If these checklists have not been submitted, no official grant decision will be made for the researchers belonging to the research institution in question.

4. If the project members are organized with some Co-Investigators, the Principal Investigator should conduct the consent process to register the Co-Investigators through the electronic application system (mentioned in "Procedures to be Performed by the Principal Investigator" (ii)). And the Co-Investigators-to-be need to obtain a necessary consent to become a Co-Investigator from their research institutions, and so on (mentioned in "Procedures to be Performed by the Research Institution" (iv)).
   The Principal Investigator cannot submit (send) the Research Proposal Document to his/her research institution until the research institutions to which the Co-Investigators-to-be belong give the consent to become a Co-Investigator in the research project, and so on. For this purpose, the Principal Investigator is asked to organize the project members immediately (see page 63).

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

The schedule below is as of August 1, 2022. There may be changes in the plan including the timing of the provisional grant decision due to COVID-19. When the changes occur it will be announced on the JSPS website and through the research institutions. It is reminded that the review may fail to be on schedule for the research categories being subject to the comprehensive review (see page 27) in particular, and consequently the provisional grant decision may be delayed.

Scientific Research (B/C), Early-Career Scientists		Challenging Research (Pioneering/Exploratory)	
November 2022 to January 2023:	Review	November 2022 to May 2023:	Review
Late February 2023:	Notice of review results	Late February 2023:	Notice of Review Results of Preliminary Screening *2
Early April 2023:	Provisional grant Decision	Late June 2023:	Notice of review results*3 Provisional grant Decision
Late April 2023:	Formal application for grant Delivery	Middle of July 2023:	Formal application for grant delivery
Around April 2023:	Disclosure of review results		

Late June 2023:	Official grant decision	Late August 2023:	Official grant decision
Middle of July 2023:	Grant delivery (part of the first term) *1	Around August 2023:	Disclosure of review results
Around October 2023:	Grant delivery (part of the second term) *1	Middle of July 2023:	Grant delivery (part of the first term) *1
		Around October 2023:	Grant delivery (part of the second term) *1

*1 The amount requested for funding or the amount requested for payment (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.

*2 For research proposals that were not adopted, review results will be notified after the review of preliminary screening is completed. Note that preliminary screening will not be conducted in the review section for which the number of application is small.

*3 The notice of review results of Challenging Research (Pioneering/Exploratory) will be given on the same day as the provisional grant decision

3. Details of Each Research Category

(1) Scientific Research (B/C)

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

A) Funding target:

Research plan conducted by a single or multiple researchers that aims at achieving a major development in creative and pioneering research

B) Range of total budget:

Applications are to be made to one of the following two divisions, according to the range of total budget.

Research category	Range of total budget
Scientific Research (B)	**5 million to 20 million yen**
Scientific Research (C)	**5 million yen or less**

C) Research period: 3 to 5 years

D) Application section "General":

In order to distinguish the research proposals in "Scientific Research (A/B/C)" categories from the ones in FY2019 call and earlier for which the application sections such as "Generative Research Fields," "Overseas Scientific Investigation," etc., the application section "General" in the current category "Scientific Research (A/B/C)" should be adopted.

E) Review Section and Review Method:

Review Section: Basic Section
(For some Basic Sections under Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections)
Review Method: Two-Stage Document Review
(See page 99 and 155 for Review Section and page 27 for Review Method)

F) Important points

- The restrictions on parallel grant application to "Early-Career Scientists (Second Time)" (For Restriction on Repeated Grant Acquisition, refer to page 25.) and "Scientific Research (A/B)" is relaxed from the FY2020 call for proposals. For details see the Table of Restriction on Parallel Grant Application/Receipt on page 48.
- The transitional measures providing preferential adoption of research proposals by young researchers of age 39 or under as of April 1 in the review of "Scientific Research (B)," which had been established in response to the suspension of the call for new proposals in

Grant-in-Aid for Young Scientists (A) in FY2018, was terminated as of the FY2020 call for proposals.

For the background on the termination of the transitional measures, see the "Enhancement of Grants-in-Aid for Scientific Research toward the 6th Science and Technology Basic Plan (Interim Report)" (June 30, 2020, Subdivision on Grants-in-Aid for Research, Science Division, Council for Science and Technology).

URL: https://www.mext.go.jp/content/20200715-mxt_gakjokik-000008754_01-1.pdf

・For Grant-in-Aid for Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections for which the number of applications is notably small (see page 155) starting from the FY2023 Call for Proposals. For details, please refer to page 28 and the following report:

- Revisions, etc. to the Grants-in-Aid for Scientific Research-KAKENHI- "Review Section Table" (March 9, 2022, Subdivision on Research Grant Screening Section of the Academic Deliberation, Science Division, Council for Science and Technology)

URL: https://www.mext.go.jp/content/20220318-mxt_gakjokik-000021232.pdf

(2) Challenging Research (Pioneering/Exploratory): KAKENHI (Multi-year Fund)

A) Funding target:

Research plan conducted by a single or multiple researchers that aims at radically transforming the existing research framework and/or changing the research direction and has a potential of rapid development.

The "Exploratory" category encompasses research plans that are of exploratory nature, or are in the budding stage.

* While there are cases in which parallel submission of research proposals to this and other categories is permitted, the research proposal to be submitted to this category must be clearly distinct from those for the other categories. Note that this research category, in particular, being targeted to the truly challenging research projects as described above, carries different review criteria from those for other categories such as "Scientific Research."

B) Range of total budget:

Challenging Research (Pioneering) **5 million to 20 million yen**

Challenging Research (Exploratory) **5 million yen or less**

C) Research period:

Challenging Research (Pioneering) 3 to 6 years

Challenging Research (Exploratory) 2 to 3 years

D) Review Section and Review Method:

Research Category	Review Section	Review Method
Challenging Research (Pioneering)	**Medium-sized Section**	**Comprehensive Review (Document Reviews and Panel Reviews)**
Challenging Research (Exploratory)	**Medium-sized Section**	**Two-Stage Document Review**

(See page 99 for Review Section and page 27 for Review Method)

E) Objectives of the research category:

The objectives of the reform and basic ideas of this research category are detailed in "Strengthening of Support for Challenging Research through KAKENHI" (December 20, 2016, Subdivision on Grants-in-Aid for Research, Science Division, Council for Science and Technology). Applicant is encouraged to read this report carefully before drafting his/her research proposal document.

URL：https://www.mext.go.jp/a_menu/shinkou/hojyo/1284543.htm

F) Important points:

・The grant adoption shall be limited to a certain number(*) so as to support only selected research projects in line with the objectives of this research category. In order to ensure the best implementation of the challenging research plan, grant allocation shall be made with the utmost respect for the budget plan in the application document.

(*) Status on application/adoption of the FY2022 call for proposals

Research category	Number of application	Number of adoption
Challenging Research (Pioneering)	1,365	183
Challenging Research (Exploratory)	9,391	1,505

・In a review section for which the number of applications exceeds a certain threshold, a preliminary screening review based on the "Research Proposal Document (Outline)" shall be conducted. (Preliminary screening will not be conducted in the review section for which the number of application is small.)

・Starting from the FY2020 call for proposal the restrictions on parallel grant application/receipt for "Challenging Research (Pioneering)" and "Scientific Research (B)" is relaxed. (See page 48.)

・Starting from the FY2023 call for proposal, the restrictions on parallel grant application/receipt for "Early-Career Scientists (Second Time)" (For Restriction on Repeated Grant Acquisition, refer to page 25.) and "Challenging Research (Pioneering)" is relaxed. For details, see Table of Restrictions on Parallel Grants Application/Receipt on page 48.

(3) Early-Career Scientists: KAKENHI (Multi-year Fund)

A) Funding target:

Research plan conducted by **an individual researcher(*) who is less than 8 years after his/her acquisition of Ph.D. (as of April 1st, 2023)**, that contains ideas of prospective future development.

(*) Including those researchers in prospect of acquiring Ph.D. by April 1, 2023 and those acquired their Ph.D. within less than 8 years by exempting the period of maternity/childcare leave(s) as of April 1, 2023.

B) Range of total budget: 5 million yen or less

C) Research period: 2 to 5 years

(*) From the FY2021 call for proposals to ensure the continuous and stable research implementation by young researchers, the research period has been changed from "2 to 4 years" to "2 to 5 years", so that applicants can opt for longer-term planning of continual and secure research activity. For the basic ideas on this extension, refer to the "Enhancement of Grants-in-Aid for Scientific Research toward the 6th Science and Technology Basic Plan (Interim Report)" (June 30, 2020, Subdivision on Grants-in-Aid for Scientific Research, Science Division, Council for Science and Technology).

D) Review Section and Review Method:

Review Section: Basic Section

Review Method: Two-Stage Document Review

(See page 99 for Review Section and page 27 for Review Method)

E) Objectives of the research category:

・The objective and significance of "Early-Career Scientists" are "to provide researchers in their early research career with opportunities to obtain research grants and to assist them for their good start as researcher" and "to support them in their developing stage to establish their own firm foothold of growth through various trials* that leads to cutting-edge research in the future." This category is designed to offer special grants to those who have started their career as researcher with excellent ideas expected to lead to future development for a certain period of time.

* Various trials in the research activities for the purpose of obtaining radical ideas and a foothold for research, including trial and error in research, engaging in research at different institutions, and exchange sessions with domestic and overseas researchers in different fields.

・From the FY2018 call for proposals on, the eligibility for application to "Early-Career Scientists" (former "Young Scientists") has been changed from the age limitation to the criterion based on the number of postdoctoral years ("an individual who is less than 8 years after his/her Ph.D. acquisition"). The transitional measures enabling non-Ph.D. researchers

of age 39 or under to apply for the "Grant-in-Aid for Early-Career Scientists" category, which was introduced in connection with such change, has been terminated as of the FY2020 call for proposals.

The background on the termination of the transitional measures refer to the "Enhancement of Grants-in-Aid for Scientific Research toward the 6th Science and Technology Basic Plan (Interim Report)" (June 30, 2020, Subdivision on Grants-in-Aid for Scientific Research, Science Division, Council for Science and Technology)

URL: https://www.mext.go.jp/content/20200715-mxt_gakjokik-000008754_01-1.pdf

F) Important points:

・Funds will be allocated focusing on the adoption rate* so as to broadly provide early-career researchers the opportunity to obtain research grants in accordance with the objectives of this research category.

(*) Status on application/adoption of the FY2022 call for proposals

Research category	Number of application	Number of adoption	The rate of new adoptions
Early-Career Scientists	13,142	5,293	40.3%

・On the entry of "Date of Ph.D. Acquisition" in the e-Rad system for those applying for the "Early-Career Scientists" category

The eligibility for application to the "Early-Career Scientists" category is based on "the number of years after acquiring Ph.D.". The verification of the eligibility of an applicant will be made by the registered information of the "Date of Ph.D. Acquisition" in the e-Rad system. The applicant for the "Early-Carrier Scientists" category, should select one of the classifications for application eligibility given below, when he/she prepares a Research Proposal Document on the KAKENHI Electronic Application System.

(1) An applicant who is less than 8 years after the acquisition of his/her Ph.D. as of April 1, 2023. (A researcher who acquired Ph.D. between April 2, 2015 and the time of proposal submission.)
(2) An applicant who does not carry a degree at the time of proposal submission, but is in prospect of acquire Ph.D. by April 1, 2023.
(3) An applicant who is deemed less than 8 years after acquisition of his/her Ph.D. as of April 1, 2023 by exempting(*) the period(s) of childcare leave, etc. (prenatal/postpartum break, childcare leave).
(*) Calculate the sum total of the leave periods, round up the total period to the fiscal year unit and then subtract it from the number of years after Ph.D. acquisition.
(Example) If the applicant has taken 6-month childcare leave three times, the fiscal years to be subtracted will be 2 (1 year and 6 months → 2 fiscal years).

An applicant with the eligibility in the classification (1) or (3) must register the "Date of Ph.D. Acquisition" in the e-Rad system at the time of proposal submission. Since the registration to the e-Rad system cannot be made by the applicant him/herself, the applicant should request the administrative staff of his/her research institution to register the Date of

Ph.D. Acquisition in the e-Rad system in time for the proposal submission. If the applicant has more than one Ph.D. degree, enter the first acquisition date.

For details on registration to the e-Rad system and the eligibility for the "Early-Career Scientists" category, refer to "Regarding the Registration Work to the Cross-ministerial Research and Development Management System (e-Rad) in Connection with the Change of the Application Requirements of Grants-in-Aid for Scientific Research (Early-Career Scientists)" on July 6, 2017.

URL: https://www.mext.go.jp/a_menu/shinkou/hojyo/1385136_00005.htm

・The restrictions on parallel grant application to "Early-Career Scientists (Second Time)" (For Restriction on Repeated Grant Acquisition, refer to the explanation below.) and "Scientific Research (S/A/B)" are relaxed from the FY2020 call for proposals. For details see Table of Restrictions on Parallel Grants Application/Receipt on page 48.

・Starting from the FY2023 call for proposal, the restrictions on parallel grant application/receipt for "Early-Career Scientists (Second Time)" (For Restriction on Repeated Grant Acquisition, refer to below.) and "Challenging Research (Pioneering)" is relaxed. For details, see Table of Restrictions on Parallel Grants Application/Receipt on page 48.

・Restriction on Repeated Grant Acquisition

The same as before the number of grant acquisition in "Early-Career Scientists" and "Young Scientists (S/A/B)" has been limited to two times ("Receiving a grant" here means, a research proposal being adopted and the official decision of grant delivery being issued. The "number of times of grant acquisition" is counted as one in case of a Series of Single-year Grants research project for which the official decision of grant delivery is issued on a yearly basis (under the same project number)).

Therefore, for the FY2023 call for proposals an individual who has received grants in any of the categories "Early-Career Scientists" and "Young Scientists (S/A/B)" twice until the FY2022 call for proposals cannot apply for the "Early-Career Scientists."

(*) Each of the following cases is counted as "Receiving a grant."

- A case in which, the PI of an adopted project to decline grant delivery or to abolish the project amid the research period, after he/she received the official decision of grant delivery.
- A case in which the applicant received the official grant decision in FY2006 for the "Grant-in-Aid for Special Purposes (Trial of Multiple Applications per Year)" that was equivalent to "Young Scientists."

Note that the following cases are ***not*** counted as "Receiving a grant."

- A case in which the PI of a provisionally adopted research project opted not to submit an application for grant delivery and hence did not actually receive the grant. (The same applies for a case in which the PI opted not to apply for the official decision of grant delivery, after withholding submission of the formal application.)
- Change in the official grant decision as a consequence of a research proposal adopted in the category "Early-Career Scientists (Trial of Independent Basic Ground Formulation)" is not counted as "Receiving a grant."
- For a research project which granted in FY2001 in the category "Encouragement of Scientists (A)" with project number "13******" which was subsequently transferred to the category "Grant-in-Aid for Young

Scientists (B)" in FY2002, there is no "repeated grant acquisition," even if the researcher would have received the official grant decision.

(*) The Council for Science and Technology deliberated ways to encourage natural step-up flow from the "Early-Career Scientists" category to the "Grant-in-Aid for Scientific Research" categories and proposed to introduce restriction on repeated grant acquisitions for "Early-career Scientists" from the FY2010 call for proposals. Refer to the "Interim Measures for Grants-in-Aid for Scientific Research (Interim Report)" (July 16, 2009, Subdivision on Grants-in-Aid for Research, Science Division, Council for Science and Technology) for details.
URL: https://www.mext.go.jp/content/1283490_01.pdf

・Restrictions on the grant application for the "Early-Career Scientists" category by an individual who has received grant(s) as Principal Investigator in any of the categories in "Scientific Research (S/A/B/C)"

In light of the objectives of the "Early-Career Scientists" category, and in order to promote the natural set-up flow from this research category to the "Scientific Research" categories, those who have once received grant(s) in any of the categories in the "Scientific Research (S/A/B/C)" shall not be eligible to apply for "Early-Career Scientists" category.

Specifically, an individual who has newly received a new grant as the Principal Investigator in the "Scientific Research (S/A/B/C) (including the "Generative Research Fields" and "Overseas Scientific Investigation")" in FY2010 or after (*1) cannot apply for "Early-Career Scientists" category from FY2021 call for proposals. ("Receiving a grant" here means, that a research proposal has been adopted and the official decision of grant delivery has been issued.)

Even if your research proposal has been duly submitted via the Electronic Application System, it may be eliminated from the subsequent review process. Applicants should give careful attention on this point.

(*1) Each of the following cases is deemed as "Receiving a grant."
- Where the PI of an adopted project declines grant delivery or abolishes said project during the research period after he/she receives the official decision of grant delivery.
- When it becomes a new PI due to the replacement of PI.

Note that the following case is ***not*** deemed as "Receiving a grant."
- Where the PI of a provisionally adopted research project opted not to submit an application for grant delivery and hence did not actually receive the grant. (The same applies for a case in which the PI opted not to apply for the official decision of grant delivery, after withholding submission of the formal application.)

For the basic ideas on the restrictions on grant application, see the "Enhancement of Grants-in-Aid for Scientific Research toward the 6th Science and Technology Basic Plan (Interim Report)" (June 30, 2020, Subdivision on Grants-in-Aid for Research, Science Division, Council for Science and Technology) in the following website.

URL: https://www.mext.go.jp/content/20200715-mxt_gakjokik-000008754_01-1.pdf

4. Review Panels and Other Matters

(1) Concerning KAKENHI Review

Omitted

(2) Review Methods and Other Matters

The review for the KAKENHI is carried out by the Scientific Research Grant Committee of the JSPS, and it is based on the Research Proposal Document.
The review takes place behind closed doors.

As applicants provide unpublished research results and research ideas, and other information in their Research Proposal Documents on the premise that the review will be conducted privately, JSPS asks reviewers to maintain their confidentiality obligations, including the following.

- In order to protect the intellectual property of the applicants and ensure fairness of the peer review system, reviewers must not disclose the content of the Research Proposal Documents or any other information, in whatever form, that they learn in the course of the review to any other person including their superiors, colleagues, or subordinates.
- Reviewers must not use any information that they learn in the course of the review for their own benefit.
- Reviewers have the obligation to keep the review materials under strict control.

The details on "assessment rules" such as assessment criteria for each research category ("Rules concerning the review and assessment for the Grants-in-Aid for Scientific Research," hereinafter referred to as the "Review and Assessment Rules") can be checked on the JSPS website:
(URL: https://www.jsps.go.jp/j-grantsinaid/01_seido/03_shinsa/index.html).
(The Review and Assessment Rules for FY2023 will be posted on the JSPS website around August 2022.)

1) The reviews of the "Scientific Research (B/C)" and the "Early-Career Scientists" are performed by each Basic Section. The six reviewers for the "Scientific Research (B)" and four reviewers each for the "Scientific Research (C) and the "Early-Career Scientists" will conduct document reviews in two-stage. The panel reviews will not be conducted (the "Two-Stage Document Review").
   For Grant-in-Aid for Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections for which the number of applications is notably small (see page 155). Joint reviews will be conducted by six to twelve reviewers.

2) The review of the "Challenging Research (Pioneering)" is performed by each Medium-sized Section. The six to eight reviewers will conduct document reviews for all the research proposals

after the preliminary screening with the Research Proposal Document (Outline), and the same reviewers who have engaged in the document reviews above will conduct a discussion from a broad perspective on each research proposal at panel reviews (the "Comprehensive Review"). (Preliminary screening will not be conducted in the review section for which the number of application is small.)

The review of the "Challenging Research (Exploratory)" is performed by each Medium-sized Section. The six to eight reviewers will conduct document reviews in two-stage after the preliminary screening with the Research Proposal Document (Outline). The panel reviews will not be conducted (the "Two-Stage Document Review"). (Preliminary screening will not be conducted in the review section for which the number of application is small.)

* The Review Section and Review Method have been revised since FY2018 Call for Proposals for Grants-in-Aid for Scientific Research-KAKENHI- (FY2018 Reform of the KAKENHI Review System). For details, please refer to the following report.
  - "Reform of the Review System for Grants-in-Aid for Scientific Research-KAKENHI-" (January 17, 2017, Science Division, Council for Science and Technology)
    URL: https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu4/toushin/1381320.htm
  - KAKENHI Reform Briefing (Held at the University of Tokyo on June 8, 2017 and at Kansei Gakuin University on June 15, 2017). The materials and video are available at the website below.
    URL: https://www.mext.go.jp/a_menu/shinkou/hojyo/1387297.htm

* In March 2022, MEXT and JSPS announced the Review Section Table which will be applicable starting from the Call for Proposals for the Grants-in-Aid for Scientific Research-KAKENHI- for FY2023. Major points, etc. of the recent revision are as follows:

[Key points of the revision]

- The examples of related research content of the Basic Sections have been changed.
  (While maintaining the current classification of Basic, Medium-sized, and Broad review sections, the examples of related research content offered for the Basic Sections have been revised)

- Joint reviews will be conducted for several Basic Sections under Grant-in-Aid for Scientific Research (B).
  (For Grant-in-Aid for Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections for which the number of applications is notably small)

For details, please refer to the following report:

- Revisions, etc. to the Grants-in-Aid for Scientific Research-KAKENHI- "Review Section Table" (March 9, 2022, Subdivision on Research Grant Screening Section of the Academic Deliberation, Science Division, Council for Science and Technology)
  URL：https://www.mext.go.jp/a_menu/shinkou/hojyo/1385136_00004.htm

* In the review process, the reviewers can utilize, as necessary, the "researchmap" and the Grants-in-Aid for Scientific Research Database (KAKEN) (see page 69).

(3) Notification of the Review Results

1) Scientific Research (B/C) and Early-Career Scientists

i) JSPS will issue a notification to the PIs and the research institutions via the electronic application system on whether the research project have been adopted or not, based on the results of the review. (Planned in late February)

ii) For Principal Investigators who had requested the disclosure of the first stage review results in the event that their research proposals were not adopted, JSPS will disclose the approximate ranking within each the Basic Section, the raw scores (average scores), and the "standard-format opinions." Disclosure will be made on the electronic application system. (Planned in April)

3)Challenging Research (Pioneering/Exploratory)

i) JSPS will notify the review results of the preliminary screening to the Principal Investigators and their research institutions whose research proposals were not adopted. (Planned in late February)

ii) JSPS will issue a notification to the PIs and the research institutions via the electronic application system on whether the research project has been adopted or not, based on the results of the review. (Planned in late June)

iii) For Challenging Research (Pioneering), JSPS will issue a disclosure to the PIs of the adopted research projects on the opinions expressed in the review results via the electronic application system. For Principal Investigators who had requested the disclosure of review results in the event that their research proposals were not adopted, JSPS will disclose the approximate ranking within each Medium-sized Section. Disclosure will be made on the electronic application system. In addition to the above, JSPS will disclose the "opinions expressed in the review results" if their proposals are not adopted in the panel review. (Planned in August)

JSPS will open to the public the summary of the opinions expressed in the review results for the adopted research project including on the Grants-in-Aid for Scientific Research Database (KAKEN). (Planned in September)

iv) For Challenging Research (Exploratory), for Principal Investigators who had requested the disclosure of review results in the event that their research proposals were not adopted, JSPS will disclose the approximate ranking within each Medium-sized Section and the opinions expressed in the review results. Disclosure will be made on the electronic application system. In addition to the above, JSPS will disclose the raw scores (average scores) assigned by the

reviewers for each rating element in the first stage document review and the “standard-format opinion” if their proposals are not adopted in the document review. (Planned in August)

III. Instructions for Prospective Applicants

1. Procedures to Be Completed Prior to Application

The following three items must be completed prior to the submission of the research proposal:

(1) Ascertainment of the Eligibility for KAKENHI Application,

(2) Confirmation of the Researcher Information Registered in the e-Rad System,

(3) Obtainment of an ID and a Password for the Electronic Application System.

(1) Ascertainment of the Eligibility for KAKENHI Application

An applicant submitting a research proposal to Grants-in-Aid for Scientific Research (KAKINHI) as Principal Investigator (PI) must meet the requirements (i) and (ii) stated below.

A researcher carrying KAKENHI eligibility through more than one research institution can submit application(s) through any of the research institutions. However, in the event of parallel submissions, they have to comply with the rules on restrictions on the parallel grant application/receipt (see page 37).

(i) **At the time of the proposal submission, a researcher needs to have been approved by his/her research institution(*) as an eligible researcher who meets the Requirements a), b) and c) stated below, and have his/her Researcher Information properly registered in the e-Rad system as eligible for KAKENHI application.**

<**Requirements**>

a) **The applicant must be an individual belonging to a research institution with a job assignment including a research activity within the said institution.** (Whether the job is paid/unpaid, or full-time/part-time is irrelevant. It is not a prerequisite of eligibility that the research activity constitutes the main part of his/her job.)

b) **The applicant must be actually engaged in a research activity in his/her research institution.** (Those who are only engaged in research assisting jobs are ineligible.)

c) **The applicant must not be a graduate student nor any other categories of student.** (However, an individual who has a position in a research institution with a research activity as his/her main job (e.g., a university teaching staff, a researcher belonging to a company, etc.) and holds a student status at the same time is eligible.)

* Here, the research institution must be such that designated according to the Article 2 of the "Rules for the Handling of Grants-in-Aid for Scientific Research" (Notification of MEXT).

(Reference) Requirements that the research institution must meet (see page 74):

< Requirements >

- The research institution must authorize the research project for which KAKENHI is granted, as its proper activity.
- The research institution must take responsibility for management and accounting of the

KAKENHI delivered to its researchers.

(ii) **The individual must not be categorized as ineligible for grant acquisition in the fiscal year covered by a call for proposals, as a penalty for his/her improper grant spending, fraudulent grant acquisition, or research misconduct using the KAKENHI or other Competitive Research Funds.**

<Important Point 1>

A researcher who is employed with a KAKENHI grant (hereinafter referred to as "KAKENHI employee"), is generally bound by their employment contract to concentrate on the research work relevant to the KAKENHI project for which he/she is employed (hereinafter referred to as "employment-related work") specified in his/her employment contract. Therefore, such a KAKENHI employee cannot apply for his/her own KAKENHI project which is to be conducted within the working hours of his/her employment.

However, provided that he/she can clearly demarcate his/her own research hours from the working hours of employment and intends to conduct his/her own research project during the working hours on his/her own initiative, the KAKENHI employee can submit his/her own KAKENHI proposal, on the condition that the following points are verified by his/her research institution. The KAKENHI employee can apply for KAKENHI as a PI or become a Co-I.

- The KAKENHI employee is granted on his/her employment contract, to conduct research on his/her own initiative, besides the employment-related work.
- The employment-related work and the work devoted to the research on his/her own initiative are clearly demarcated in regard to the working hours and the effort.
- The KAKENHI employee is able to secure enough research hours (besides the working hours for his/her employment-related work) to be allotted to his/her own KAKENHI project.

[Self-motivated research activities by young researchers employed with KAKENHI funding]

A young researcher (*) who is employed with KAKENHI funds (KAKENHI employee) and meets the following conditions, may conduct his/she own research during the working hours assigned for the employment-related work, after going through the necessary procedures set by his/her research institution. He/She can apply for KAKENHI as a PI or become a Co-I.

(1) A young researcher desires on his/her own will to conduct his/she own research.

(2) The PI and Co-I (the employer of the young researcher) desires that the said research has a positive contribution to the promotion of the funded research project for which he/she is employed, and the research institution approves the said decision.

(3) The PI and Co-I judges that the efforts to be spared by the young researcher to the said research within the extent that do not cause any hindrance to the execution of the funded research project for which he/she is employed, and the research institution approves the judgement. (The upper limit of the efforts to be spared to the self-motivated research is 20

percent of the efforts to be put into the funded research project for which he/she is employed.)

* In this context, "young researcher" is defined as an individual who is age 39 or under or less than 8 years after Ph.D. acquisition as of April 1 of each fiscal year, and whose job assignment includes research activities. When applying for Grants-in-Aid for Scientific Research (KAKINHI) he/she must meet the eligibility requirements for KAKENHI application.
Provided that the KAKENHI employer approves such self-motivated research activities in accordance with its funding resources (project) rules, if a researcher had originally met the eligibility requirements for KAKENHI's self-motivated research activities at the time of his/her application or participation, he/she may apply for KAKENHI and continue to engage in the adopted research project even if, during the project period, he/she is no longer age 39 or under or less than 8 years after Ph.D. acquisition. If there are changes to the funding resources (project) of the KAKENHI employer, the researcher must abide by the new funding resources (project) rules and reobtain the approval to conduct self-motivated research activities as a young researcher at the time the of the changing of funding resources.

(Reference) Views on the self-motivated research activities by the KAKENHI employee

Attachment 1 to the "Changes in the FY2020 Call for Proposals for Grants-in-Aid for Scientific Research (KAKENHI) and Other Matters" (March 19, 2020) (Excerpt)
https://www.jsps.go.jp/j-grantsinaid/06_jsps_info/g_200316/index.html

Grants-in-Aid for Scientific Research (hereinafter referred to as "KAKENHI") is a funding scheme that is intended to promote development of scientific research (based on original ideas of researchers), encompassing basic to applied researches in all fields ranging from humanities and social sciences to natural sciences. Scientific research is a source of innovation *i.e.*, value creation based on new knowledge and has a vital role in nurturing human resources for leading a knowledge-based society broadly. It is particularly important to foster young scientists who are responsible for the next generation in order that the scientific research may sustainably exercise its role in the society.
It enable young researchers employed with a KAKENHI grant to conduct self-motivated research activities (including research activities with other research funds and activities helping research/management capacity building; hereinafter the same). Allowing them to conduct research activities in an independent and free research environment contributes not only to fostering young researchers, but also to the further development of the KAKENHI projects of their research institutions through research based on their freewheeling thinking and to the development of scientific research the entire country. Therefore, the concept of self-motivated research activities by young researchers is introduced in the KAKENHI scheme in this call for proposals.

For details refer to the following.
"Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (Revised on December18, 2020, Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds)
https://www.mext.go.jp/a_menu/shinkou/torikumi/1385716_00001.htm

<Important Point 2>

JSPS Research Fellows (DC) and JSPS International Research Fellows are not eligible for KAKENHI application. In general, graduate students are not eligible either (See the notes below for exceptions.). Therefore, an individual with the status of student in a research institution is not eligible even if he/she also holds a position to conduct research in that or other research institution.

(Note 1) The term "student" as defined here does *not* include such an individual who has a position to conduct research in his/her research institution, as the main job (e.g., university teaching staff, researcher belonging to company, etc.), and holds a student status at the same time.

(Note 2) If a JSPS Research Fellow (SPD, PD, RPD, or CPD) meets the application requirements set forth above at the research institution which he/she registers as host research institution, **he/she can also apply for the following research categories other than the "Grant-in-Aid for JSPS Fellows," but only from the registered host research institution.** Unlike applying for KAKENHI as PI, he/she may apply for any of these research categories so long as he/she takes part in a KAKENHI proposal as Co-I.

(i) Publicly Offered Research of Transformative Research Areas (A)
(ii) Scientific Research (B/C)
(iii) Challenging Research (Exploratory)
(iv) Early-Career Scientists
(v) Fund for the Promotion of Joint International Research (Fostering Joint International Research (A)) (Excluding CPD)

<Important Point 3>

The PIs and the Co-Is constitute the "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). In an event that they have committed improper grant spending, fraudulent grant acquisition, research misconduct, etc. the eligibility for KAKENHI application will be suspended for a period of time specified by the rule.

In the following cases, an individual registered in the e-Rad system as "eligible for KAKENHI application" may be subject to different treatment.

- In case the research institution to which the individual belongs has made a judgement that it is not appropriate to let the individual conduct the said research activity as a part of his/her work within the research institution, the research institution may withhold the submission of his/her KAKENHI proposal, or may withhold the formal application for grant delivery of a provisionally adopted KAKENHI grant resulting in declination of the grant in question.
- In case a KAKENHI recipient has failed to submit the "Report on the Research Achievements" that is due after the completion of the research period of his/her KAKENHI without any good reason, no new KAKENHI grant(s) will be delivered to him/her, even if the grant(s) have been provisionally adopted. Moreover, if a KAKENHI recipient has failed to submit the "Report on the Research Achievements" by the due date, then the delivery of

KAKENHI grant(s) for that fiscal year will be suspended.

(2) Confirmation of the Researcher Information Registered in the e-Rad System

A researcher who intends to submit a research proposal document as the PI to any of the KAKENHI research categories for which "Call for Proposals" is announced, must carry the eligibility for KAKENHI application at the time of submission of the "Research Proposal Document" from his/her research institution to JSPS, and must be registered in the e-Rad system as such.

Therefore, it is important for the researcher to ascertain proper registration of his/her Researcher Information in the e-Rad system.

The registration in the e-Rad system is handled by the research institution to which the researcher belongs. The researcher should check with the administrative section of his/her institution about the registration procedures including the registration deadline within the institution, the method of confirmation of the current contents of registration, etc. If any of the entry items (such as "affiliation," "position," etc.) of the researcher who has been already registered in the e-Rad system need updating, they should be duly completed.

*** On the entry of "Date of Ph.D. Acquisition" in the e-Rad system for those applying for the "Early-Career Scientists" category**

The eligibility for application to the "Early-Career Scientists" category, the application requirement is based on "the number of years after acquiring Ph.D." (see page 24). The verification of the eligibility of an applicant will be made by the registered information of the "Date of Ph.D. Acquisition" in the e-Rad system. The applicant for the Early-Carrier Scientists" category, should select one of the three classifications for application eligibility given below, when he/she prepares a research proposal document on the KAKENHI Electronic Application System.

(1) An applicant who is less than 8 years after the acquisition of his/her Ph.D. as of April 1, 2023 (a researcher who acquired his/her Ph.D. between April 2, 2015 and the time of proposal submission).
(2) An applicant who does not carry a doctoral degree at the time of proposal submission, but is in prospect of acquiring Ph.D. by April 1, 2023.
(3) An applicant who is deemed less than 8 years after acquisition of his/her Ph.D. as of April 1, 2023 by exempting(*) the period(s) of childcare leave, etc. (prenatal/postpartum leave, childcare leave).
(*) Calculate the sum total of the leave periods, round up the total period in year unit and then subtract it from the number of years after Ph.D. acquisition
(Example: If an applicant has taken 6-month childcare leave three times, the fiscal years to be subtracted will be 2 (1 year and 6 months → 2 years).)

An applicant with the eligibility in the classification (1) or (3) must register the "Date of Ph.D. Acquisition" in the e-Rad system at the time of proposal submission. Since the registration to the e-Rad system cannot be made by the applicant him/herself, the applicant should request the administrative section of his/her institution to register the "Date of Ph.D. Acquisition" in the e-Rad system in time for the proposal submission. If the applicant has more than one Ph.D. degree, enter the first acquisition date.
For details on registration to the e-Rad system and the eligibility for the "Early-Career Scientists" category, refer to "Regarding the registration work to the Cross-ministerial Research and Development Management System (e-Rad) in connection with the change of the application requirements of Grant-in-Aid for Scientific Research (Early-Career Scientists)" on July 6, 2017.

URL: https://www.mext.go.jp/a_menu/shinkou/hojyo/1385136_00005.htm

(3) Obtainment of an ID and a Password for the Electronic Application System

When the research institution completes the e-Rad registration of a researcher, an ID and a password will be issued for him/her. The researcher can access the KAKENHI Electronic Application System using the ID and password and prepare the Research Proposal Document.

The ID and the password issued to a researcher remain valid after he/she moves to another research institution. Every researcher should exercise due care in handling his/her ID and password so as to prevent their leakage and abuse.

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

The "Grant-in-Aid for Research Activity Start-up" is aimed at supporting researchers who are not able to apply for this round of call for proposals, such as those who are newly obtaining research position, and those who are returning from their leave of absence for childcare, etc. after the regular submission deadline.

The FY2023 Call for Proposals in this category is scheduled for March 2023, and the provisional conditions of the eligibility for application is as follows:

(A) An individual who obtains eligibility for KAKENHI application on or after October 1, 2022, and has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS.

(B) An individual who has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS because he/she was on maternity leave or childcare leave in FY2022.

(*) FY2023 Grants-in-Aid for Specially Promoted Research, Transformative Research Areas, Scientific Research, Challenging Research, and Early-Career Scientists

(For details, refer to the Application Procedures for "Grant-in-Aid for Research Activity Start-up" to be announced in March 2023.)

Since the registration to the e-Rad system is handled by the research institution, researchers who may come to fall under the category (A) above, should act accordingly by contacting the administrative section of their respective research institutions.

(Note) JSPS Research Fellows (SPD, PD, RPD, or CPD) are not eligible for application to the "Grant-in-Aid for Research Activity Start-up," even if they satisfy the above application conditions.

2. Restriction on Parallel Grant Application/Receipt

A researcher who intends to submit research proposal(s) to KAKENHI should be well acquainted with the "Restrictions on Parallel Grants Application/Receipt" before starting preparation of research proposal document(s) to check if applications to the intended categories are permitted.

(1) The Basic Policy for Restriction on Parallel Grant Application/Receipt

KAKENHI consists of different "Research Categories" and "Application Sections" set on the basis of budget scale, content, and other factors of the intended research, so as to meet various needs and research styles of the applicants.

On the other hand, in consideration of the necessity to support many excellent researchers with limited funding resources, and of the possible detrimental influence of overcrowding applications on the proper management of the review process, the "Rules for Restrictions on Parallel Submission of Research Proposals" have been set up, according to the following basic principles.

- ○ Give considerations so as to ensure that as many excellent researchers as possible can be supported with limited funding resources.
- ○ Give considerations so as to ensure that the number of applications does not become excessive in comparison with the review scheme of each research category.
- ○ The restrictions to be enforced are primarily directed to the applicant as Principal Investigator (PI) who bears all responsibility for the implementation of the research project. In some cases such as the research categories with large budget scale, however, the restrictions may be also extended to individuals as the Co-Investigator (Co-I).
- ○ The restriction on parallel submission of research proposals and the restriction on simultaneous receipt of grants are separately set on each of the KAKENHI research categories, in accordance of the basic concepts outlined above and by taking into consideration the purpose, characteristics and other factors of each KAKENHI research category.

Restrictions on parallel grant application/receipt do apply to the current round of call for proposals. Accordingly, **the applicant should be well acquainted with the description of the rules given below, and the "Table of Restriction on Parallel Grant Application/Receipt" (see pages 48-53)**.

In case a particular research project falls under the concept of "unreasonable duplication" as put forward in the "Guidelines on the Proper Implementation of Competitive Research Funds" (see page 7), it may be judged as such in the review process. Therefore, the applicant should take due precautions in preparing his/her research proposal document.

(2) Restrictions on Parallel Grant Application/Receipt

(i) Cases in which the applicant intends to submit two research proposals as the "Principal Investigator" for both.
["PI → PI" type] (see page 48)

Every researcher can make only one application as PI in one and the same research

category at the same time. Therefore, if a researcher holds an on-going KAKENHI research project in a particular category, he/she cannot submit a new KAKENHI research proposal in the same research category.

(cases marked with "—" in the Table)

In case an applicant intends to submit two research proposals (to different research categories) as PI for both, or an applicant who is the PI of the prospected on-going project in FY2023 intends to submit new research proposal as PI the following rules (cases A to C) of restrictions on parallel grant application /receipt apply.

However, this restriction does not apply in the following cases: if a researcher carries over all or part of the KAKENHI grant (Series of Single-year Grants) to be used in the next fiscal year; if a researcher extends the research period for a KAKENHI grant (Multi-year Fund) or a KAKENHI grant (Partial Multi-year Fund) in the final fiscal year (not including an extension due to interruption of research for maternity/childcare leave, research stay abroad, etc.); and in case of "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project" (see "Special Provisions for the Restriction on Parallel Grant Application/Receipt" on page 43).

A. Cases where a researcher can submit only one research proposal as PI.

(cases marked with "×" in the Table)

B. Cases where a researcher cannot submit a new research proposal, as he/she holds an on-going research project.

(cases marked with "▲" in the Table)

C. Cases where a researcher can make parallel submission of research proposals to a research category in the column A and to another category in the column B. If both proposals are adopted, only one of them is granted, as indicated by the symbols in the Table.

For cases marked with "■" the research category in the column A is given priority.
For cases marked with "□" the research category in the column B is given priority.

(ii) Cases in which an applicant submitting a research proposal as PI to a category in column A participates as Co-I in another research proposal submitted to a category in column B. ["PI → Co-I" type] (see page 50)

For cases in which a researcher submitting a certain research proposal as PI intends to participate in another research project as Co-I, or a researcher who is the PI of the prospected on-going project in FY2023 intends to participate in another research project as Co-I, there are no restrictions in general so that the researcher can participate in both projects.

However, for some research categories, chiefly "Specially Promoted Research," the following rules (cases A to C) of restrictions on parallel grant application/receipt as stated below do apply.

A. Cases in which the researcher cannot be a Co-I of the other project.

(cases marked with "×" in the Table)

B. Cases where the researcher cannot be a Co-I of the other project, because of his/her on-going

project.

(cases marked with "▲" in the Table)

C. Cases where a researcher can participate in the other proposal as Co-I, but, if both are adopted, he/she has to carry out the project in the column A.

〔**For cases marked with "■" the research category in the column A is given priority.**〕

(iii) Cases where a researcher who participates as Co-I in a newly-submitted research proposal or a researcher who is a Co-I of an on-going project intends to submit a new research proposal as PI of another research project.
["Co-I → PI" type] (see page 52)

For cases in which a researcher participating in a certain research project (on-going or newly submitted) as Co-I intends to submit another research proposal as PI, or a researcher who is a Co-I of the prospected on-going project in FY2023 intends to submit another research proposal as PI, there are no restrictions in general, so that the researcher can participate in both projects.

However, for some research categories, chiefly "Specially Promoted Research," the following rule (cases A to C) of restrictions on parallel grant application/receipt as stated below do apply.

〔**For cases marked with "□" the research category in the column B is given priority.**〕

(iv) Cases in which a researcher who participates as Co-I in more than one research projects (on-going or newly submitted) also intends to participate as Co-I in another research proposal.
["Co-I → Co-I" type]

For cases in which a researcher participating in a certain research project (on-going or newly submitted) as Co-I intends to participate in another research project as Co-I, or a researcher who is a Co-I of the prospected on-going project in FY2023 intends to participate in another research project as Co-I, there are no restrictions in general, so that the researcher can participate in both projects.

However, for Specially Promoted Research, a researcher cannot participate in more than one research projects as Co-I. If a researcher has already been a Co-I of an on-going Specially Promoted Research project, he/she cannot commit him/herself as Co-I to a new project in the Specially Promoted Research category.

(3) Restrictions on Simultaneous Receipt of Grants

According to the "Restriction on Parallel Grant Application/Receipt," cases in which parallel submission of research projects is permitted, but only one of them can be granted even if both are adopted, are handled as follows.

Handling of the cases marked with "■" or "□" when both projects are adopted.

A. For the "PI → PI" type (such as the case of PI of a Specially Promoted Research project and PI of another project in other research categories), the researcher must decline the grant delivery of the project in the lower priority category, or abolish the on-going project in the lower priority. In particular, note that if a PI of a Planned Research project in the

Transformative Research Areas or Scientific Research on Innovative Areas (Research in a Proposed Research Area) is selected as PI for a Specially Promoted Research, such Planned Research project is not allowed to replace its PI and must be abolished. The relative priority of the research categories is indicated by the marks "■" and "□" in the Table.

B. If the PI of a newly adopted Specially Promoted Research project has been acting as Co-I of on-going project(s) in other research categories, he/she must withdraw the Co-I status of the latter project(s).
In an event that the withdrawal of the Co-I status makes the implementation of the latter project(s) unsustainable, the said project(s) have to be abolished (or withdrawn).

(4) Important Notes

(i) Even for the cases in which parallel grant application/receipt is not prohibited by the rules, the applicant should give a careful consideration so as not to fall in such situation that he/she cannot carry his/her responsibility as PI or Co-I, by committing him/herself to too many research projects. The applicant should be well acquainted with the content of "Elimination of Unreasonable Duplication and/or Excessive Overconcentration in the Grant Allocation" mentioned on page 7.

(ii) Starting from the FY2022 call for proposals, the schedule for the call for proposals has been changed to earlier dates, and as such, the timing of the call for proposals for some research categories subject to the restriction on parallel grant application/receipt may vary. Applicants should check the "Table of Restriction on Parallel Grant Application/Receipt" carefully. **In a case for which the restriction on parallel grant application/receipt applies, applicants are not eligible to submit a new application for the other research category even if he/she withdraws the research project that he/she had already submitted (sent) through the electronic application system.**

Example 1: A researcher cannot apply for Grant-in-Aid for Scientific Research (B) as PI after applying for Grant-in-Aid for Scientific Research (A) as PI (even if he/she withdraws the application for Grant-in-Aid for Scientific Research (A)).

Example 2: A researcher cannot apply for Grant-in-Aid for Challenging Research (Pioneering)) as PI after applying for Grant-in-Aid for Transformative Research (A) (Planned Research) as PI (even if he/she withdraws the application for Grant-in-Aid for Transformative Research (A) (Planned Research)).

(iii) If the applicant had submitted an application for a research category in a call for proposals in the previous fiscal year, but the review results had not yet been notified during the application period for the call for proposals of the current fiscal year, the restrictions on parallel grant application/receipt do not apply between the research category of the previous fiscal year under review and the research category in the call for proposals of the current fiscal year; provided, however, that if the research category of the previous fiscal year is adopted and the applicant receives the official grant decision, the adopted research project will be considered

an on-going research project, and the restrictions on parallel grant application/receipt shall apply between the research category in the call for proposals of the current fiscal year.

Example: If an applicant submitted an application as PI for the FY2022 call for proposals for Grant-in-Aid for Challenging Research (Pioneering), but the review results has not yet been notified during the application period for the FY2023 call for proposals for Transformative Research (A) (Planned Research), he/she may apply for Transformative Research (A) (Planned Research) in FY2023. However, if his/her research project for Challenging Research (Pioneering) is adopted thereafter and the applicant receives the official grant decision, the Challenging Research (Pioneering) will be considered an on-going research project, and the restrictions on parallel grant application/receipt shall apply between the Transformative Research (A) (Planned Research).

(iv) In some cases, even after a research proposal has been duly submitted via the Electronic Application System, it may be eliminated from the subsequent review process on the basis of the rules of restrictions on parallel grant application/receipt. This may happen, for example, in a case where the said proposal becomes in conflict with the "Restrictions on Parallel Submission of Research Proposals" by a change in the project members of an on-going research project. The applicant should check against such possibility before submitting the research proposal document.

(v) The rules of restrictions on parallel submission of research proposals do apply to a case in which a researcher carrying eligibility for applications in more than one research institutions intends to submit different proposals from each of those institutions.

(vi) In regard to the "Table of Restriction on Parallel Grant Application/Receipt," the participation to the "Transformative Research Area" and the "Administrative Group" in the "Scientific Research on Innovative Areas (Research in a Proposed Research Area)" are deemed exceptional (see "Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- FY2023 (MEXT)"). The following points should be noted.

A. The PIs of the research projects of the "Transformative Research Areas" and of the "Administrative Group" of the "Scientific Research on Innovative Areas (Research in a Proposed Research Area)" should check the restriction on parallel submission of proposal as PI or Co-I of other research proposals they intend to submit in parallel by referring to the relevant entries of the "Table of Restriction on Parallel Grant Application/Receipt."

B. The Co-Is of the research projects of the "Transformative Research Areas" and of the "Administrative Group" of the "Scientific Research on Innovative Areas (Research in a Proposed Research Area)" should check the restriction on the **participation as PI or Co-I to the "Planned Research (Planned Research other than the research projects of the "Administrative Group") and the parallel submission of proposal as PI or Co-I of**

other research proposals they intend to submit in parallel by referring to the relevant entries of the "Table of Restriction on Parallel Grant Application/Receipt."

(vii) In regard to the Restrictions on Parallel Grant Application/Receipt relevant to "the researcher submitting a research proposal as PI or Co-I" or "the PI or Co-I of the prospected on-going project in FY2023" for the research categories for which the call for proposals is announced by MEXT, applicants should refer to the Attached Table 1.

(viii) When an individual who is a JSPS Research Fellow (SPD, PD, RPD, or CPD) has obtained the eligibility for KAKENHI application at the research institution which he/she has registered as his/her host research institution, he/she can submit a research proposal in the following research categories; the "Publicly Offered Research" of the "Transformative Research Areas (A)," "Scientific Research (B/C)," "Challenging Research (Exploratory)," "Early-Career Scientists" and "Fund for the Promotion of Joint International Research (Fostering Joint International Research (A) (excluding CPD)."

As for the restrictions on parallel grant application/receipt for JSPS Fellows (SPD, PD, RPD, or CPD), the applicant should read the description in the section "Grant-in-Aid for JSPS Fellows (JSPS Research Fellow)" of the "Table of Restriction on Parallel Grant Application/Receipt," even if he/she does not receive the "Grant-in-Aid for JSPS Fellows."

(ix) If an individual is granted his/her application in those research categories for which the rule of restrictions on parallel grant application/receipt applies ("Specially Promoted Research," "Planned Research" of the "Transformative Research Areas" (including the research projects of the "Administrative Group"), "Scientific Research (S/A)," "Challenging Research (Pioneering)" and "Grant-in-Aid for Research Activity Start-up"), and if subsequently he/she is adopted as JSPS Fellow, he/she has to choose either the JSPS fellowship or the KAKENHI project.

A JSPS Research Fellow (SPD, PD, RPD, or CPD), during the period of his/her term, cannot submit any research proposals to those research categories for which the rules of restrictions on parallel grant application/receipt applies.

Therefore, even after a submitted proposal has been duly filed in the Electronic Application System, it may be eliminated from the subsequent review process by the rules of restrictions on parallel grant application/receipt. The applicant should check against such possibility before submitting the research proposal document.

(x) There are no restrictions on parallel grant application/receipt between KAKENHI and other competitive research funds schemes. Still, applicants should read the description in the column "Elimination Unreasonable Duplication and/or Excessive Overconcentration in the Grant Allocation" on page 7. **Particularly in the review process of "Specially Promoted Research," such research projects that are deemed as more suitable for funding schemes aiming at promoting strategic and creative research (such as JST Strategic Basic Research Programs) will, in principle, not be adopted. The applicant should give a careful consideration on this**

point.

(5) Special Provisions for the Restriction on Parallel Grant Application/Receipt (Research Proposal Submission in the Fiscal Year Previous to the Final Fiscal Year of the Research Period of an On-going Research Project)

(i) If a PI, who is currently conducting a research project, desires to restructure his/her research plan in consideration of the progress of said research, he/she may submit a new research proposal as the "research proposal submission in the fiscal year preceding the final fiscal year of the research period of an on-going research project" if FY2023 is the final fiscal year[1] of the research period of:

- the on-going research project in the category of Specially Promoted Research or Scientific Research (excluding the Generative Research Fields of Scientific Research (B/C)) with a research period (determined at the time of the initial provisional grant decision) of 4 years or longer; or,
- the on-going research project in the category of Early-Career Scientists[2] with a research period (determined at the time of the initial provisional grant decision) of 3 years or longer.

Only a single new research proposal can be submitted on the basis of the restructuring of the on-going research project.

(*1) In case a research period was interrupted and extended due to maternity/childcare leave, research stay abroad, etc. the final fiscal year refers to the last fiscal year after the extension.

(*2) The special provision above is also applicable to a PI currently conducting a research project in the "Young Scientists (A/B)" category adopted in FY2017 or earlier.

(ii) The research categories for which new applications can be submitted using the "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project" are as shown in the following table:

(iii)

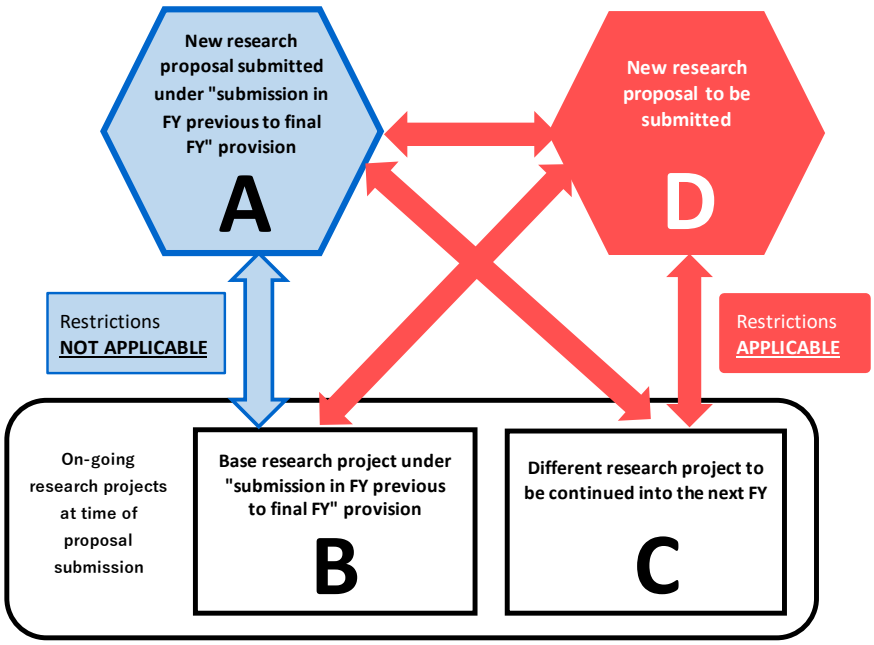
Research categories of the on-going research project which is to be restructured for submission of a new proposal in the fiscal year previous to the final fiscal year	Research categories to which submission of a new proposal can be submitted in the fiscal year previous to the final fiscal year of the on-going project
" Specially Promoted Research" whose research period is 4 years or more	"Scientific Research (S/A/B/C)"
"Scientific Research (S/A/B/C)" whose research period is 4 years or more (except application section "Generative Research Fields")	"Specially Promoted Research," "Scientific Research (S)," "Scientific Research (A/B/C) "
"Early-Career Scientists" whose research period is 4 years or more	"Scientific Research (S/A/B/C)"
"Young Scientists (A/B)" whose research period is 4 years	"Scientific Research (S/A/B/C)"
"Early-Career Scientists," and "Young Scientists (A/B)" whose research period is 3 years	"Scientific Research (S/A/B)"

(iii) It is not possible to submit a new proposal as the "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project" by

restructuring an on-going project in the “Scientific Research (B/C) (application section “Generative Research Fields”)” category.

(iv) **The restriction on parallel grant application/receipt does not apply** between a new research proposal submitted by using the “research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project” and the on-going research project on which the new application is based. (Still, the restriction on simultaneous grant receipt does apply, if the new proposal is granted, as detailed in the next item.) On the other hand, the restriction on parallel grant application/receipt does apply between these and other research proposal(s) (including the on-going project(s)) to be submitted by the same PI.

Figure 1: Image of restrictions on parallel grant application/receipt when using the “research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project”



In this figure, "submission in the FY previous to the final FY" provision shall mean "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project."

Whereas: “A” is a new research proposal submitted by using the “research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project”; and “B” is the on-going research project on which the new application is based. In this case, the restriction on parallel grant application/receipt does not apply between A and B. However, if the researcher is a PI in a different research project “C” (in addition to B) which will be continued into the next fiscal year, the restriction on parallel grant application/receipt shall apply between A and C. Furthermore, if the researcher intends to submit a new research proposal “D” in addition to the “research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project,” restrictions on parallel grant application/receipt shall apply between A and D, B and D, and C and D.

(v)**When a new research proposal submitted to the "Specially Promoted Research" or "Scientific Research (A/B/C)" categories by using the "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project" is adopted, the grant (KAKENHI (Series of Single-year Grants)) in FY2023 for the on-going research project on which the new proposal is based is not to be delivered and the grant (KAKENHI (Multi-year Fund)) must be abolished in FY2022. When a new research proposal is submitted to the categories of "Scientific Research (S)" by using the "research proposal submission in the fiscal year previous to the final fiscal year of the research period of an on-going research project" is adopted, the provisional grant decision will be made in Early May and after, so that the grant for the on-going project need to be returned in full if it might have already been delivered upon abolishing the on-going project.**

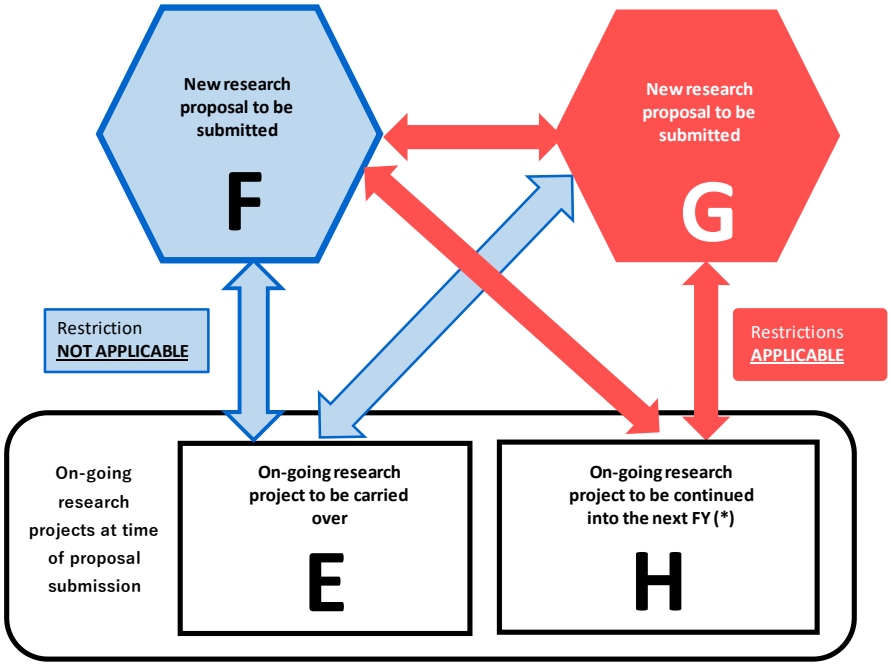
Therefore, **the research proposal document to be newly submitted should include the necessary expenditures for the implementation of the on-going research project in FY2023**. Even if the new research proposal is adopted, you must still submit your report on the research achievements for the on-going project by June 30, 2024, so make sure to include the expenditures you need to compile the research achievements.

(Handling of the Restrictions on Parallel Grant Application/Receipt in Relation to carry-over of KAKENHI (Series of Single-year Grants) to the following fiscal year)

(i) When a PI of an on-going project of KAKENHI (Series of Single-year Grants) carries over all or parts of the grant to be used in the following fiscal year, **the restriction on parallel grant application/receipt does not apply** between the project approved for carry-over and the new research proposal he/she intends to submit.

(ii) On the other hand, the restriction on parallel grant application/receipt does apply between the new research proposal and other new research proposal(s) (including the on-going project(s)) to be submitted by the same PI.

Figure 2: Image of restrictions on parallel grant application/receipt in relation to carry-over of KAKENHI (Series of Single-year Grants) to the following fiscal year



Whereas: "E" is an on-going research project to be carried over to the next fiscal year; and "F" is a new research proposal to be submitted. In this case, the restriction on parallel grant application/receipt does not apply between E and F. However, if the researcher intends to submit a research proposal for a different research proposal "G" (in addition to F) for this call for proposals, the restriction on parallel grant application/receipt does not apply between E and G, but shall apply between F and G. Furthermore, if the researcher has an on-going research project "H" (in addition to E) which will be continued into the next fiscal year, restrictions on parallel grant application/receipt shall apply between F and H. Similarly, if the researcher intends to submit a research proposal for G, restrictions on parallel grant application/receipt shall also apply between G and H.

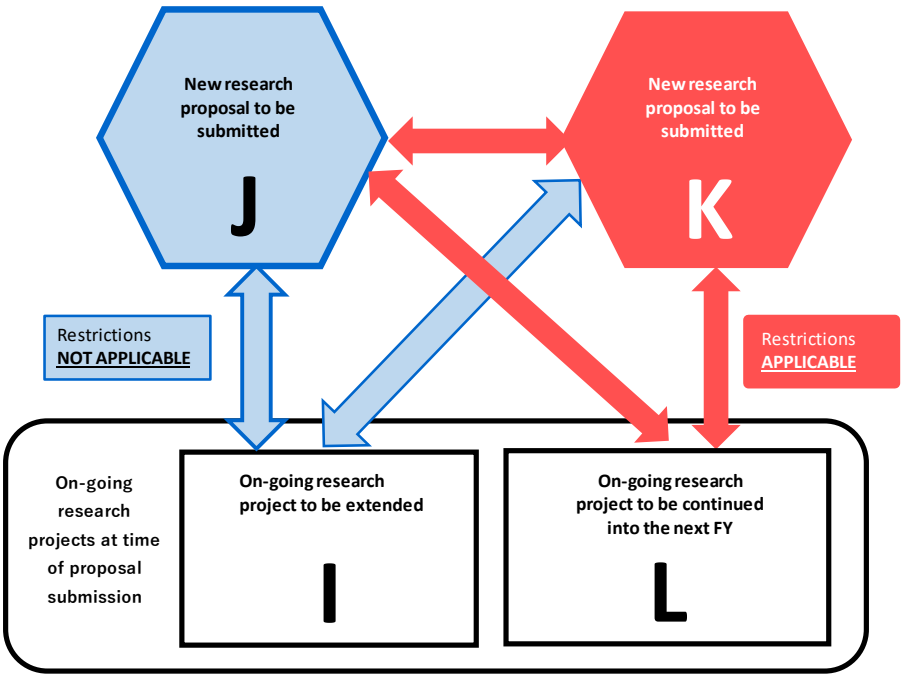
* Here, the same research project as E to be conducted in the fiscal year following the fiscal year in which it is to be carried over will fall under H. (For example, if a research project is an on-going project that will be continued into FY2023, the research project to be carried over will fall under E in Figure 2 during FY2022, and will fall under H in FY2023.)

(Handling of the Restrictions on Parallel Grant Application/Receipt in Relation to Extension of the Research Period of KAKENHI (Multi-year Fund))

(i) When a PI of an on-going project of KAKENHI (Multi-year Fund) or KAKENHI (Partial Multi-year Fund) extends the research period in the final fiscal year (except the case with the interruption of the research due to maternity/childcare leave, research stay abroad, etc.), **the restriction on parallel grant application/receipt does not apply** between the on-going project and a new research proposal he/she intends to submit.

(ii) On the other hand, the restriction on parallel grant application/receipt does apply between the new research proposal and other new research proposal(s) (including the on-going project(s)) to be submitted by the same PI.

Figure 3: Image of restrictions on parallel grant application/receipt in relation to extension of the research period of KAKENHI (Multi-year Fund)



Whereas: "I" is an on-going research project in the final fiscal year of the research period, and the researcher intends to extend the research period (not including cases where researcher suspends the research for maternity/childcare leave, etc.) ; and "J" is a new research proposal to be submitted. In this case, the restriction on parallel grant application/receipt does not apply between I and J. However, if the researcher intends to submit a research proposal for a different research proposal "K" (in addition to J) for this call for proposals, the restriction on parallel grant application/receipt does not apply between I and K, but shall apply between J and K. Furthermore, if the researcher has an on-going research project "L" (in addition to I) which will be continued into the next fiscal year, restrictions on parallel grant application/receipt shall apply between J and L. Similarly, if the researcher intends to submit a research proposal for K, restrictions on parallel grant application/receipt shall also apply between K and L.

Attached Table 1　Table of Restriction on Parallel Grant Application/Receipt

1－1) Type “Principal Investigator (New Proposal/Continued) (Column A) → Principal Investigator (Column B)”

Column A				Column B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (B) General	Scientific Research (C) General	Early-Career Scientists (First Time)	Early-Career Scientists (Second Time)*1	Transformative Research Areas (A) Administrative Group	Transformative Research Areas (A) Planned Research	Transformative Research Areas (A) Publicly Offered Research	Transformative Research Areas (B) Administrative Group	Transformative Research Areas (B) Planned Research	Challenging Research Pioneering	Challenging Research Exploratory	Fostering Joint International Research (B)*3
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Specially Promoted Research		New Proposal	PI	－	■	■	■	■	■	■	×	■	■	×	■	■	■	■
		Continued	PI	－	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Scientific Research (S)		New Proposal	PI	□	－	■	×	×	×	■	□							■
		Continued	PI	□	－	▲	▲	▲	▲	▲	▲							▲
Scientific Research (A)	General	New Proposal	PI	□	□	－	×	×	×	■								
		Continued	PI	□	▲	－	▲	▲	▲	▲								
	Overseas Scientific Investigation	Continued	PI	□	▲	★	★	★	▲	▲								▲
Scientific Research (B)	General	New Proposal	PI	□	×	×	－	×	×	■								
		Continued	PI	□	▲	▲	－	▲	▲	▲								
	Overseas Scientific Investigation	Continued	PI	□	▲	★	★	★	▲	▲								▲
	Generative Research Fields	Continued	PI	□	□						□	□		□	□	▲	▲	
Scientific Research (C)	General	New Proposal	PI	□	×	×	×	－	×	×						×	×	
		Continued	PI	□	▲	▲	▲	－	▲	▲						▲	▲	
	Generative Research Fields	Continued	PI	□	□						□	□		□	□	▲	▲	
Young Scientists(A)		Continued (First Time)	PI	□	▲	▲	▲	▲	▲	▲						▲		▲
		Continued (Second Time)*2	PI	□	▲	▲	▲	▲	▲	▲								▲
Young Scientists(B)		Continued (First Time)	PI	□	▲	▲	▲	▲	－	－						▲	▲	▲
		Continued (Second Time)*2	PI	□	▲	▲	▲	▲	－	－							▲	▲
Early-Career Scientists		New Proposal (First Time)	PI	□	×	×	×	×	－	－						×	×	□
		New Proposal (Second Time)*1	PI	□	□	□	□	×	－	－							×	□
		Continued (First Time)	PI	□	▲	▲	▲	▲	－	－						▲	▲	▲
		Continued (Second Time)*2	PI	□	▲	▲	▲	▲	－	－							▲	▲
Challenging Research	Pioneering	New Proposal	PI	□				×	×		×	×	×			－	×	
		Continued	PI	□				▲	▲		▲	▲	▲			－	▲	
	Exploratory	New Proposal	PI	□				×	×	×						×	－	
		Continued	PI	□				▲	▲	▲						▲	－	
Research Activity Start-up		Continued	PI															
JSPS Fellows (JSPS Research Fellow)		Continued	PI	▲	▲	▲					▲	▲		▲	▲	▲		▲
Fostering Joint International Research (B)		Continued	PI	□	□				▲	▲								－
Fostering Joint International Research		Continued	PI															×
Fostering Joint International Research (A)		Continued	PI															×
Home-Returning Researcher Development Research		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 (application section) (In case he/she has a continued research project mentioned in column A, he/she cannot apply for a research project mentioned in column B)

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

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

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

★: As a rule parallel grant application 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 The case of application for a second time grant acquisition in the research category, “Grant-in-Aid for Early-Career Scientists”. For Restriction on Repeated Grant Acquisition, refer to page 25.

*2 Applicable to those receiving a second time grant for a continued research project under "Early-Career Scientists."For Restriction on Repeated Grant Acquisition, refer to page 25.

*3 As for the Fostering Joint International Research (B), a call for proposals is scheduled in around April 2023.

1－2) Type “Principal Investigator (New Proposal/Continued) (Column A) → Principal Investigator (Column B)”

This table shows the restriction on parallel grant application/receipt in case of "a person who tries to apply as Principal Investigator for a research project mentioned in column 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 FY2023 (continued research project) mentioned in column A" applies as Principal Investigator for mentioned in column B.

Column A				Column B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (B) General	Scientific Research (C) General	Early-Career Scientists	Challenging Research: Pioneering	Challenging Research: Exploratory
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				PI	PI	PI	PI	PI	PI	PI	PI
Scientific Research on Innovative Areas (Research in a Proposed Research Area)	Administrative Group (*)	Continued	PI	▲	▲					▲	
	Planned Research	Continued	PI	□						▲	
	Publicly Offered Research	Continued	PI	□						▲	
Transformative Research Areas (A)	Administrative Group	New Proposal	PI	×	■					×	
		Continued	PI	▲	▲					▲	
	Planned Research	New Proposal	PI	□						×	
		Continued	PI	□						▲	
	Publicly Offered Research	New Proposal	PI	□						×	
		Continued	PI	□						▲	
Transformative Research Areas (B)	Administrative Group	New Proposal	PI	×							
		Continued	PI	▲							
	Planned Research	New Proposal	PI	□							
		Continued	PI	□							

(*) The "International Activities Supporting Group" has the same restrictions on duplications as the "Administrative Group".

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

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

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

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

Note that if a PI of a Planned Research project in the Transformative Research Areas or Scientific Research on Innovative Areas (Research in a Proposed Research Area) is selected as PI for a Specially Promoted Research, such Planned Research project is not allowed to replace its PI and must be abolished.

2－1) Type “Principal Investigator (New Proposal/Continued) (Column A) → Co-Investigator (Column B)”

This table shows the restriction on parallel grant application/receipt in case of "a person who tries to apply as Principal Investigator for a research project mentioned in column 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 FY2023 (continued research project) mentioned in column A" participates in a research project mentioned in column B as Co-Investigator.

Column A \ Column B				Specially Promoted Research	Scientific Research (S)	Scientific Research (A)	Scientific Research (B)	Scientific Research (C)	Scientific Research on Innovative Areas (Research in a Proposed Research Area)	Transformative Research Areas (A)	Transformative Research Areas (B)	Challenging Research		Fostering Joint International Research (B)*
						General	General	General	Planned Research	Planned Research	Planned Research	Pioneering	Exploratory	
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I
Specially Promoted Research		New Proposal	PI	×	■	■	■	■	■	■	■	■	■	■
		Continued	PI	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Scientific Research (S)		New Proposal	PI											
		Continued	PI											
Scientific Research (A)	General	New Proposal	PI											
		Continued	PI											
	Overseas Scientific Investigation	Continued	PI											
Scientific Research (B)	General	New Proposal	PI											
		Continued	PI											
	Overseas Scientific Investigation	Continued	PI											
	Generative Research Fields	Continued	PI											
Scientific Research (C)	General	New Proposal	PI											
		Continued	PI											
	Generative Research Fields	Continued	PI											
Young Scientists(A)		Continued	PI											
Young Scientists(B)		Continued	PI											
Early-Career Scientists		New Proposal	PI											
		Continued	PI											
Challenging Research	Pioneering	New Proposal	PI											
		Continued	PI											
	Exploratory	New Proposal	PI											
		Continued	PI											
Research Activity Start-up		Continued	PI											
JSPS Fellows (JSPS Research Fellow)		Continued	PI											
Fostering Joint International Research(B)		Continued	PI											▲
Fostering Joint International Research		Continued	PI											
Fostering Joint International Research(A)		Continued	PI											
Home-Returning Researcher Development Research		Continued	PI											

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

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

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

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

* As for the Fostering Joint International Research (B), a call for proposals is scheduled in around April 2023.

2－2) Type “Principal Investigator (New Proposal/Continued) (Column A) → Co-Investigator (Column B)”

This table shows the restriction on parallel grant application/receipt in case of "a person who tries to apply as Principal Investigator for a research project mentioned in column 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 FY2023 (continued research project) mentioned in column A" participates in a research project mentioned in column B as Co-Investigator.

Column A				Column B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (B) General	Scientific Research (C) General	Challenging Research (Pioneering)	Challenging Research (Exploratory)
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				Co-I	Co-I	Co-I	Co-I	Co-I	Co-I	Co-I
Scientific Research on Innovative Areas (Research in a Proposed Research Area)	Administrative Group (*)	Continued	PI	▲						
	Planned Research	Continued	PI							
	Publicly Offered Research	Continued	PI							
Transformative Research Areas (A)	Administrative Group	New Proposal	PI	×						
		Continued	PI	▲						
	Planned Research	New Proposal	PI							
		Continued	PI							
	Publicly Offered Research	New Proposal	PI							
		Continued	PI							
Transformative Research Areas (B)	Administrative Group	New Proposal	PI							
		Continued	PI							
	Planned Research	New Proposal	PI							
		Continued	PI							

(*) The "International Activities Supporting Group" has the same restrictions on duplications as the "Administrative Group".

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

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

3－1) Type “Co-Investigator (New Proposal/Continued) (Column A) → Principal Investigator (Column B)”

This table shows the restriction on parallel grant application/receipt in case of "a person who tries to participate as Co-Investigator in a research project mentioned in column A (research categories for which JSPS organizes a call for proposals), or a person who has already become Co-Investigator of a research project that is scheduled to be continued in FY2023 (continued research project) mentioned in column A" applies as Principal Investigator for mentioned in column B.

Column A				Column B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A)	Scientific Research (B)	Scientific Research (C)	Early-Career Scientists	Transformative Research Areas (A)			Transformative Research Areas (B)		Challenging Research		JSPS Fellows (JSPS Research Fellow)
						General	General	General		Administrative Group	Planned Research	Publicly Offered Research	Administrative Group	Planned Research	Pioneering	Exploratory	
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI	PI
Specially Promoted Research		New Proposal	Co-I	×						×							
		Continued	Co-I	▲						▲							
Scientific Research (S)		New Proposal	Co-I	□													
		Continued	Co-I	□													
Scientific Research (A)	General	New Proposal	Co-I	□													
		Continued	Co-I	□													
	Overseas Scientific Investigation	Continued	Co-I	□													
Scientific Research (B)	General	New Proposal	Co-I	□													
		Continued	Co-I	□													
	Overseas Scientific Investigation	Continued	Co-I	□													
	Generative Research Fields	Continued	Co-I	□													
Scientific Research (C)	General	New Proposal	Co-I	□													
		Continued	Co-I	□													
	Generative Research Fields	Continued	Co-I	□													
Challenging Research	Pioneering	New Proposal	Co-I	□													
		Continued	Co-I	□													
	Exploratory	New Proposal	Co-I	□													
		Continued	Co-I	□													
Fostering Joint International Research(B)		Continued	Co-I	□													

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

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

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

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

3－2) Type “Co-Investigator (New Proposal/Continued) (Column A) → Principal Investigator (Column B)”

This table shows the restriction on parallel grant application/receipt in case of "a person who tries to participate as a new Co-Investigator in a research project mentioned in column A (research categories for which MEXT organizes a call for proposals), or a person who has already become Co-Investigator of a research project that is scheduled to be continued in FY2023 (continued research project) mentioned in column A" applies as Principal Investigator for mentioned in column B.

Column A				Column B: Specially Promoted Research	Scientific Research (S)	Scientific Research (A) General	Scientific Research (B) General	Scientific Research (C) General	Early-Career Scientists	Challenging Research (Pioneering)	Challenging Research (Exploratory)	JSPS Fellows (JSPS Research Fellow)
				New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal	New Proposal
				PI	PI	PI	PI	PI	PI	PI	PI	PI
Scientific Research on Innovative Areas (Research in a Proposed Research Area)	Planned Research	New Proposal	Co-I	☐								
		Continued	Co-I	☐								
Transformative Research Areas (A)	Planned Research	New Proposal	Co-I	☐								
		Continued	Co-I	☐								
Transformative Research Areas (B)	Planned Research	New Proposal	Co-I	☐								
		Continued	Co-I	☐								

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/she only implements the research of the research project in B.

3. Preparation of the KAKENHI Application Form (Research Proposal Document), etc.

Grants-in-Aid for Scientific Research is a competitive research funds intended to provide financial support for creative and pioneering research conducted by individual researchers. Therefore, the contents of the Research Proposal Document must be original planned by the applicant.

In preparing Research Proposal Document, plagiarism and/or misappropriation of the research contents of others are strictly impermissible. Applicants must comply with research ethics.

In addition, if the research plan involves traveling abroad, etc., applicants should carefully determine the feasibility of the plan.

Applicants should note that the entire Research Proposal Document, including the title of the research project will be reviewed, and will be publicized widely in the Grants-in-Aid for Scientific Research (KAKENHI) Database (KAKEN) if the research proposal is adopted. Therefore, make sure to select a title that effectively reflects the content of the research project.

For submission of a research proposal, the applicant (PI) has to complete the relevant Research Proposal Document. The Research Proposal Document consists of two parts: "Items to be entered in the Website" and "Forms to be uploaded as an attached file."

The PI (applicant) should complete the Research Proposal Document (PDF file) by entering the "Items to be entered in the Website" and by uploading the "Forms to be uploaded as an attached file" to the Electronic Application System. Then he/she should submit the Research Proposal Document to the administrative section of his/her research institution, by the deadline set by the institution.

Preparation and submission of the KAKENHI Research Proposal Document should follow the procedures detailed below.

(1) Revision of the Research Proposal Document

As for the Research Proposal Document, in the Reform of the KAKENHI Review System, since April 2018, the definition of the "Collaborating Researcher" has been abolished as a revision of the definition of the research members in conjunction with some revisions such as the disapproval of the description on the research achievements by the "Collaborating Researcher" on and after the FY2018 call for proposals in September 2017. In addition, on and after the FY2019 call for proposals in September 2018, the revision including the way to describe the achievements in the column of research achievements has been made, and with the Research Proposal Document some changes such as followings have been applied. When preparing the Document, your careful confirmation is requested on the contents of the booklet, the Application Procedures for Grants-in-Aid for Scientific Research-KAKENHI- (Supplement) "Forms/Procedures for Preparing and Entering a Research Proposal Document."

- The "Research Achievements of the Principal Investigator (PI) and Co-Investigator(s) (Co-I(s))" column in the Research Proposal Document is to be revised as the "Applicant's

Ability to Conduct the Research and the Research Environment" column in accordance with the rating elements.

Furthermore, the summary on the discussion related to this revision such as in the Subdivision on Research Grant Screening Section of the Academic Deliberation in the Science Division, Council for Science and Technology is as follows.

(Reference) The summary on the discussion including in the Subdivision on Research Grant Screening Section of the Academic Deliberation in the Science Division, Council for Science and Technology

(Problem recognition, etc.)

- ○ During the review process, there seems to be a reality which is easily enable to distort what an application and a review per se should be, including the possibility to enumerate unnecessarily the achievements irrelevant to the research project in the "Research Achievements" column.
- ○ There seems to be a possibility that the "Research Achievements" column gives a wrong recognition that without filling in the column spaces with many of research achievements as possible, it might be disadvantage for applicants at the review.
- ○ There is still a room for consideration on the "way to make applicants describe" their research achievements and so on although it is necessary to verify them to assess their ability to conduct the research corresponding to the shared responsibility of the Principal Investigator and the Co-Investigators.
- ○ If there might be a possibility to provide applicants and others with a recognition that as if a performance over-emphasis principle be prevailing at the review in the KAKENHI, a rectification of it should be attempted as far as possible and a consideration to contrive to do so is required.
- ○ In case making continuous use of the "Research Achievements" column, a consideration enabling applicants to properly describe information necessary to assess their ability to conduct the research is required. (An impression as if the "filling in the column is just an important thing" should be dispelled.)
- ○ Regarding the assessment on the ability to conduct the research by using such as the research achievements, an attempt to foster a correct recognition for both sides of applicants and reviewers is required.

(Basic policy, etc. for the revision of the Research Proposal Document)

- ○ At the review of the KAKENHI, as for research projects proposed by the Principal Investigator, in association with considering a scientific significance and creativity, a clarification of research objectives and so on, it is also intended to assess the researchers' ability to conduct the research strictly and to select appropriate research projects.
- ○ The positioning of the research achievements in the Research Proposal Document is for judging a practical feasibility of the research described in the Research Proposal Document before rolling out the research.
- ○ Based on the understandings above, the research achievements should be clearly defined that they are regarded as verifying the ability to conduct the research for the research plan.

Starting from the FY2022 Call for Proposals (July 2021), the Research Proposal Document forms for Scientific Research and Early-Career Scientists have been amended. Items "1. Research objectives, research method, etc." and "2. Circumstances leading to this research proposal, etc." have been revised. Please read the Supplement to the Application Procedures "Forms/Procedures for Preparing and Entering a Research Proposal Document" carefully.

(2) Preparation of KAKENHI Research Proposal Document

For the preparation of the KAKENHI research proposal document, **the applicant must first access the Electronic Application System using his/her e-Rad ID and Password.**

On the Research Proposal Document

The KAKENHI Research Proposal Document consists of the following two parts:

Items to be entered in the Website:

Items to be directly entered by the PI (applicant) on the website of the KAKENHI Electronic Application System

Forms to be uploaded:

A part containing such entries as "Research Objectives, Research Method, etc." to be prepared by downloading the form from the "Grants-in-Aid for Scientific Research-KAKENHI-" page within the JSPS website (URL: https://www.jsps.go.jp/j-grantsinaid/03_keikaku/download.html), and by uploading the filled form to the KAKENHI Electronic Application System so as to compile a PDF file of the research proposal document. **(Paper-based applications will not be accepted.)**

<table>
<tr><td rowspan="2">Research category
Application Section</td><td colspan="3">Research Proposal Document</td></tr>
<tr><td>Items to be entered in the Website
(First part)</td><td>Forms to be uploaded
(File ID)</td><td>Items to be entered in the Website
(Second part)</td></tr>
<tr><td>Scientific Research (B)</td><td rowspan="8">To be entered in the electronic application system
(title of research project, fundamental data on the research project such as total budget, data on the project members, etc.)</td><td>S-13</td><td rowspan="8">To be entered in the electronic application system
(title of research project, fundamental data on the research project such as total budget, data on the project members, etc.)</td></tr>
<tr><td>Scientific Research (C)</td><td>S-14</td></tr>
<tr><td>Challenging Research (Pioneering)</td><td>S-41-1
S-41-2</td></tr>
<tr><td>Challenging Research (Exploratory)</td><td>S-42-1
S-42-2</td></tr>
<tr><td>Early-Career Scientists</td><td>S-21</td></tr>
<tr><td>Continued Research Project (in case of a major change in the research plan)</td><td>S-99</td></tr>
</table>

* Forms can be downloaded from the "Grants-in-Aid for Scientific Research-KAKENHI-" page within the JSPS website blow even before the obtaining of the e-Rad ID and password.
URL: https://www.jsps.go.jp/j-grantsinaid/03_keikaku/download.html

(3) Electronic Submission of the Research Proposal Document

i) An applicant should prepare his/her Research Proposal Document (PDF file) by entering the "Items to be entered in the Website" and by uploading the separately prepared "Forms to be uploaded as an attached file" to the Electronic Application System, following the instructions in the "FY2023 Procedures for Preparing and Entering a Research Proposal Document" and "FY2023 Procedures for Preparing and Entering a Research Proposal Document (Items to be entered in the Website)."

ii) For Basic Sections to be reviewed jointly in Scientific Research (B), research proposal documents (PDF files) submitted to those Basic Sections will be sent to the reviewers without displaying

any information pertaining to the Basic Section contained in the first part (items to be entered in the Website). This is to ensure appropriate review as a Section subject to joint review, not as an independent Basic Section.

iii) The compiled books of the submitted KAKENHI Research Proposal Document to be sent to the reviewers are **in black-and-white (gray scale) print**. Therefore, in preparing the Research Proposal Document, the applicant should pay attention to the clarity of the figures when printed in gray scale.

iv) The Research Proposal Documents are collected and submitted to JSPS by the research institution to which the PIs (applicant) belong. Therefore, the applying PI **should submit his/her Research Proposal Document to the administrative section of his/her research institution by the deadline set by the institution. (It is not allowed to submit the Research Proposal Document directly to JSPS.)**

Before submission, the applying PI should carefully check the contents of the Research Proposal Document (PDF file) he/she prepared, and subsequently proceed to the "Check Completed and Submission" stage of the submission process. (This amounts to submitting the Research Proposal Document (PDF file) to the administrative section of his/her research institution.) After the "Approval" process by his/her institution, no further corrections or modifications to the submitted Research Proposal Document (PDF file) is possible.

v) The personal information contained in the Research Proposal Document and any personal information registered in Electronic Application System will be used for purposes such as the elimination of unreasonable duplication and/or excessive concentration in the allocation of competitive research funds, the appropriate funding of KAKENHI grants, and to conduct questionnaires on scientific technology policies including KAKENHI grants (this includes providing the data to external contractor(s) in charge of electronic processing and management of the KAKENHI data). Any such information will also be provided to the e-Rad system. (The information registered in the e-Rad system is utilized for proper assessment of research and development by national funding, development of effective and efficient comprehensive strategy, planning and development of resource allocation policy, etc. Therefore, the information will be supplied to the Cabinet Office through the e-Rad system. The applicant may be requested to cooperate in verification of the information and other related works.)

The information on the adopted KAKENHI projects (the title of research project, the name of PI and his/her affiliated research institution, the grant to be delivered, research period, etc.) is categorized as "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 Incorporated Administrative Agencies" (Act No. 140 of 2001). The information will be made public through press release materials, the Grants-in-Aid for Scientific Research Database (KAKEN) of the National Institute of Informatics, and other means.

The researchers and their affiliated research institutions are requested to carry out the application procedures (including iv) above) with full understanding of the information handling (utilization, provision and disclosure) stated above.

Important Checkpoints of the Research Proposal Document

In preparing a Research Proposal Document, the applicant should pay attention to the following points among others, so as to avoid "outright rejection by incompleteness of the research proposal document."

1. Qualification as a KAKENHI Project

The following kinds of research plans fall outside the scope of funding target:

A) A research plan which merely aims at purchasing ready-made research equipment.

B) A research plan whose purpose is to build a large-size research facility or equipment which is more appropriate to be funded by other resources.

C) A research plan whose purpose lies at developing and selling goods and/or services (including market research associated with such as them).

D) An entrusted research conducted as regular business.

E) A research plan with a yearly research expenditure for any of the fiscal years in its research period **less than 100,000 yen**.

2. Eligibility of the Project Members

The PI (see 1 on page 62) may organize a research team with appropriate combination of Co-Investigator(s) (Co-I) (see 2 on page 62), and Research Collaborator(s) (see 3 on page 64), as needed by the nature of the research project.

As is the case for PI, **Co-Investigator(s) is also subject to verification of their KAKENHI eligibility by their respective research institutions by the time of proposal submission (see notes below).**

On the other hand, to be a Research Collaborator(s), registration to the e-Rad system is not a requirement.

< Requirements >

A) **The applicant must be an individual belonging to a research institution with a job assignment including research activity within the said institution.** (Whether the job is paid/unpaid, or full-/part-time is irrelevant. It is not a prerequisite of eligibility that the research activity constitutes the main part of his/her job.)

B) **The applicant must be actually engaged in a research activity in his/her research institution.** (Those who are only engaged in research assisting jobs are ineligible.)

C) **The applicant must not be a graduate student or any other categories of student.** (However, an individual who has a position in a research institution with a research activity as his/her main job (e.g., a university teaching staff, a researcher belonging to a company, etc.) and holds a student status at the same time is eligible.)

(*) Here, the research institution must be such that designated according to the Article 2 of the "Rules for the Handling of Grants-in-Aid for Scientific Research" (Public Notice of MEXT).

(Reference) Requirements that the research institution must meet (see page 74):

< Requirements >

- The research institution must authorize the research project for which KAKENHI is granted, as its proper activity.
- The research institution must take responsibility for management and accounting of the KAKENHI delivered to its researcher staffs.

(Note 1) A JSPS Research Fellow (SPD, PD, RPD or CPD) who meets the above application requirements at his/her host research institution can participate in a KAKENHI research project as Co-I. There are no restrictions on the research categories in which he/she can participate as Co-I unlike in the case of participating as PI.

(Note 2) JSPS Research Fellows (DC), International JSPS Fellows and graduate students (or students of any other category) cannot be a PI or Co-I of a KAKENHI project.

<Important point 1>

A KAKENHI employee is generally bound by his/her employment contract to concentrate on the research work relevant to the employment-related work specified in it. Therefore, such a KAKENHI employee cannot apply for his/her own KAKENHI project which is to be conducted within the working hours of his/her employment.

However, provided that a KAKENHI employee can clearly demarcate his/her own research hours from the working hours of employment and intends to conduct his/her own research project during the working hours on his/her own initiative, he/she can submit his/her own KAKENHI proposal, on the condition that the following points are verified by his/her research institution. In this case, he/she can apply as PI, or participate to other KAKENHI project(s) as Co-I.

- The KAKENHI employee is granted on his/her employment contract, to conduct research on his/her own initiative, besides the employment-related work.
- The employment-related work and the work devoted to the research on the KAKENHI employee's own initiative are clearly demarcated in regard to the working hours and the

effort.

- The KAKENHI employee is able to secure enough research hours (besides the working hours for his/her employment-related work) to be allotted to his/her own KAKENHI project.

[Self-motivated research activities by an "early-career scientist" employed with KAKENHI]

A young researcher (*) who is employed with KAKENHI funds (KAKENHI employee) and meets the following conditions, may conduct his/her own research during the working hours assigned for the employment-related work, after going through the necessary procedures set by his/her research institution. He/she can apply for KAKENHI as a PI or become a Co-I.

(1) The young researcher desires on his/her own will to conduct his/her own research.
(2) The PI or Co-I (the employer of the young researcher) decides that the said research has a positive contribution to the promotion of the funded research project for which he/she is employed, and the research institution approves the decision.
(3) The PI or Co-I judges that the efforts to be spared by the young researcher to the said research is within the extent that do not cause any hindrance to the execution of the funded research project for which he/she is employed, and the research institution approves the judgement. (The upper limit of the efforts to be spared to the self-motivated research is 20 percent of the efforts to be put into the funded research project for which he/she is employed.)

* In this context, "young researcher" is defined as an individual who is age 39 or under or less than 8 years after Ph.D. acquisition as of April 1 of each fiscal year, and whose job assignment includes research activities. When applying for Grants-in-Aid for Scientific Research (KAKENHI) he/she must meet the eligibility requirements for KAKENHI application.

Provided that the KAKENHI employer approves such self-motivated research activities in accordance with its funding resources (project) rules, if a researcher had originally met the eligibility requirements for KAKENHI's self-motivated research activities at the time of his/her application or participation, he/she may apply for KAKENHI and continue to engage in the adopted research project even if, during the project period, he/she is no longer age 39 or under or less than 8 years after Ph.D. acquisition. If there are changes to the funding resources (project) of the KAKENHI employer, the researcher must abide by the new funding resources (project) rules and reobtain the approval to conduct self-motivated research activities as a young researcher at the time the of the changing of funding resources.

(Reference) Views on the self-motivated research activities by the KAKENHI employee

Attachment to the "Proposals of the Grants-in-Aid for Scientific Research (KAKENHI) in Fiscal Year 2020 " (March 19, 2020) (Excerpt)
https://www.jsps.go.jp/j-grantsinaid/06_jsps_info/g_200316/index.html

Grants-in-Aid for Scientific Research (hereinafter referred to as "KAKENHI") is a funding scheme that is intended to promote development of scientific research (based on original ideas of researchers), encompassing basic to applied researches in all fields ranging from humanities and social sciences to natural sciences. Scientific research is a source of innovation *i.e.*, value creation based on new knowledge and has a vital role in nurturing human resources for leading a knowledge-based society broadly. It is particularly important to foster young scientists who are responsible for the next generation in order that the scientific research may sustainably exercise its role in the society.
It enable young researchers employed with a KAKENHI grant to conduct self-motivated research activities (including research activities with other research funds and activities helping research/management capacity building; hereinafter the same). Allowing them to conduct research activities in an independent and free research environment contributes not only to fostering young researchers, but also to the further development of the KAKENHI projects of their research institutions through research based on their freewheeling thinking and to the development of scientific research the entire country. Therefore, the concept of self-motivated research activities by young researchers is introduced in the KAKENHI scheme in this call for proposals.

For details, refer to the following:
"Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (Revised on December 18, 2020, Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds)
https://www.mext.go.jp/a_menu/shinkou/torikumi/1385716_00001.htm

<Important point 2>

The PIs and the Co-Is constitute the "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). In an event that they have committed improper grant spending, fraudulent grant acquisition or research misconduct, the eligibility for KAKENHI application will be suspended for a period of time specified by the rule.

In the following cases, an individual registered in the e-Rad system as "eligible for KAKENHI application" may be subject to different treatment.

- In case the research institution to which the individual belongs has made a judgement that it is not appropriate to let him/her conduct the said research activity as a part of his/her work within the institution, it may withhold the submission of his/her KAKENHI proposal, or may withhold the formal application for grant delivery of a provisionally adopted KAKENHI grant resulting in declination of the grant in question.
- In case a KAKENHI recipient has failed to submit the "Report on the Research Achievements" that is due after the completion of the research period of his/her KAKENHI without any good reason, no new KAKENHI grant(s) will be delivered to him/her, even if the grant(s) have been provisionally adopted. Moreover, if a KAKENHI recipient has failed to submit the "Report on the Research Achievements" by the due date, then the delivery of KAKENHI grant(s) for that fiscal year will be suspended.

1) Principal Investigator (PI) (Applicant)

(A)Principal Investigator is the main recipient of the grant who bears full responsibility for the implementation of the research project (including compiling the research achievements).

An individual who is anticipated to become unable to carry through the PI's responsibility over the entire research period due to, for example, loss of the KAKENHI eligibility caused by PI's own accord, should refrain from becoming a PI. (See note below.)

(Note)

The Principal Investigator is the researcher who plays the central role in the implementation of the research plan and thus bears a heavy responsibility. An individual who is anticipated to lose his/her eligibility for KAKENHI application during the research period due to his/her own accord so that is anticipated to be unable to carry through the responsibility, should refrain from becoming a Principal Investigator. Substitutions of the PI of an on-going KAKENHI project are not permitted.

As an exception, for the "Planned Research" of "Transformative Research Areas" and "Scientific Research on Innovative Areas (Research in a Proposed Research Area)" replacements of PI may be accepted by going through required procedures.

(B) **When organizing project members, the Principal Investigator must obtain a consent to become a Co-Investigator from the researcher via electronic application system in advance.**

(C) The PI must be registered in the e-Rad system as "Eligible for KAKENHI Application." It is also required that he/she is *not* designated as "ineligible for grant receipt" in the fiscal year covered by a call for proposals (suspension of eligibility), as a penalty for such misconducts as improper grant spending, fraudulent grant acquisition or research misconduct associated with KAKENHI or any other competitive research funds.

2) Co-Investigator (Co-I)

(A) The Co-Investigator is a recipient of the grant who, in cooperation with the PI, bears responsibility for the implementation of the research project in accordance with the clear share of his/her roles. The Co-I must be a member of the project who receives a share of the grant based on the contents of the share as a recipient of the grant. (This rule applies even when the Co-I belongs to the same institution as the PI.)

An individual who is anticipated to become unable to carry through the Co-I's responsibility over the entire research period due to, for example, the loss of the KAKENHI eligibility caused by Co-I's own accord, should refrain from becoming a Co-I.

(B)The Co-I must be registered in the e-Rad system as being "Eligible for KAKENHI Application." It is also required that he/she is *not* designated as being "ineligible for grant receipt" in the fiscal year covered by a call for proposals (a suspension of eligibility), as a penalty for such

misconducts as an improper grant spending, a fraudulent grant acquisition or a research misconduct associated with the KAKENHI or any other competitive research funding.

＜About the Process of Participation of Co-Investigator in Project Members＞

A consent process to become a Co-Investigator is conducted via the electronic application system if the applicant adds a Co-Investigator to project members. Following processes for both Principal Investigator and Co-Investigator(s) are necessary in the application process.

[Actions to be taken by the Principal Investigator]

・The Principal Investigator must enter the information on the researcher whom he/she wants to add to the project members in the "Project Members List" column on the "Application Information Input" screen, request the researcher to become a Co-Investigator, and obtain a consent from the Co-Investigator-to-be by the time of submitting (sending) the Research Proposal Document to his/her research institution,.

[Actions to be taken by the researcher who is requested to become a Co-Investigator]

・If the researcher is requested to become a Co-Investigator by the Principal Investigator via the electronic application system, the researcher must select "Consent" or "Dissent" after confirming the contents to be consented.

Procedures to be Performed by the Principal Investigator	**Procedures to be Performed by the Co-Investigator-to-be**	**Procedures to be Performed by the Research Institution to which Co-Investigator-to-be belongs**
① Request to become a Co-Investigator →	② Give a consent to become a Co-Investigator →	③ Give a consent to become a Co-Investigator as a standpoint of the research institution
The Principal Investigator requests to the researcher who is to be requested to become a Co-Investigator to participate in the project as a Co-Investigator via the electronic application system.	The Co-Investigator-to-be is requested to participate in the project as a Co-Investigator from the Principal Investigator via the electronic application system and then the Co-Investigator-to-be selects a consent (or a dissent).	The information consented by the Co-Investigator-to-be is shown via the electronic application system and then the research institution also conducts the process such as giving consent to him/her.

・The organization of the project members should be completed through all necessary procedures mentioned above to be carried out with the approximate target of **two weeks prior to the deadline for the submission of the application documents set by JSPS**. (All application procedures are workable on the system after two weeks prior to the deadline for the submission of the application documents. To submit (send) application documents to the research institution to which the Principal Investigator belongs, it is necessary to obtain consents from all the Co-Investigators-to-be.

* Please refer to the KAKENHI (Grants-in-Aid for Scientific Research) Electronic Application System Operation Manual for the detailed information such as operating environments, operating methods,

and so on (URL: https://www-shinsei.jsps.go.jp/kaken/topkakenhi/shinsei_ka.html).

* After the researcher has given a consent to become a Co-Investigator, the information on the Co-Investigator-to-be will be shown to the research institution to which he/she belongs via the electronic application system, and then it will be necessary to obtain a consent, etc. from the research institution as well.

Since the Principal Investigator cannot submit (send) the Research Proposal Document to his/her research institution until the research institution to which the Co-Investigator-to-be belongs gives the consent, etc., be sure to finish the process in time for the deadline of the submission.

3) Research Collaborator

(A) Research Collaborator is an individual who cooperates in the implementation of a research project other than the PI and the Co-I(s).

(B) Registration as "Eligible for KAKENHI application" in the e-Rad system is *not* a requirement for becoming a Research Collaborator.
For example, the following people can also participate in the research project as a Research Collaborator: a postdoctoral researcher, a graduate student, a research assistant (RA), a JSPS Research Fellows (DC), JSPS Research Fellows (SPD, PD, RPD or CPD) who are not registered as eligible for KAKENHI application in their host research institution, a researcher belonging to an overseas research institution, a researcher belonging to a corporation not designated as a research institution according to Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research, and an individual offering research support such as technician and intellectual property specialist.

3. Requirements for the Appropriation of Research Expenditure

1) Expenditures that can be covered by direct expense

Expenditures necessary for the implementation of the research plan (including those necessary for compiling the research achievements) can be covered by the direct expense.

* If any of the expenditure categories (equipment costs, travel expenses, or personnel cost/honoraria) exceeds 90% of the total yearly expenditure in any fiscal year of the research period, or if the expenditure in category Consumables or Miscellaneous constitutes a significant portion of the total expenditure, the necessity of that spending should be clarified in Research Proposal Document.

[Direct Expense of Competitive Research Funds to Cover the Costs of Assignments Other Than Research]

The cost of "buyout" (*i.e.*, the cost for hiring someone taking over a part of the duties other than research (*) of the Principal Investigator or Co-Investigator(s)) can be covered by the direct expense so that they

can secure ample amount of time for research projects (the buyout system).

* The kinds of duties that can be covered by the buyout system are those authorized as proper jobs of the researcher at his/her research institution, excluding (i) research activities, and (ii) administrative work for institutional management. They include educational and related activities, e.g., educational activities (teaching and preparation for teaching, supervising students) and social engagement activities (medical practices, outreach activities). Activities associated with business profit are excluded.

Starting from the FY2021 Call for Proposals, the buyout system is applicable in the research categories listed below. A KAKENHI applicant who wish to use the buyout system should do so according to the buyout scheme agreed upon between him/her and his/her research institution.

When an applicant wishes to use the buyout system, enter the cost of the buyout in the "Miscellaneous expense" column, and enter the word "buyout" in the "Item" column of the Research Proposal Document form. (Please refer to the supplementary volume of "Application Procedures for Grants-in-Aid for Scientific Research—KAKENHI—" (Forms/Procedures for Preparing and Entering a Research Proposal Document).

[Research categories subject to the buyout system]

Specially Promoted Research, Transformative Research Areas (excluding "Platforms for Advanced Technologies and Research Resources"), Scientific Research on Innovative Areas (Research in a Proposed Research Area) (excluding "Platforms for Advanced Technologies and Research Resources"), Scientific Research, Challenging Research (including "Challenging Exploratory Research"), Early-Career Scientists (including "Young Scientists (A/B)"), Research Activity Start-up, International Leading Research , Fostering Joint International Research (B), Home-Returning Researcher Development Research (limited to those who belongs to the domestic research institutions), Special Purposes.

[Research categories ***not*** subject to the buyout system]

Encouragement of Scientists, Publication of Scientific Research Results, JSPS Fellows, Transformative Research Areas (Platforms for Advanced Technologies and Research Resources), Scientific Research on Innovative Areas (Research in a Proposed Research Area) (Platforms for Advanced Technologies and Research Resources), Fostering Joint International Research (A) (including the Joint International Research before name change). As for the research category of Fostering Joint International Research (A) (including the Joint International Research before name change) it is possible to budget the cost for hiring replacements.

As for the details of the expenses covered by the buyout system and matters to be done by the research institution refer to the following.

"Amendment Enabling Direct Expense of Competitive Research Funds to Cover the Costs of Duties Other Than Research (Introduction of Buyout System)" (October 9, 2020, Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds)

https://www.mext.go.jp/a_menu/shinkou/torikumi/1385716_00003.htm

The objective of the buyout system is to increase the number of hours the PI (or Co-I) can devote to the funded project on the basis of his/her own needs and request. Accordingly, items such as the actual presence of the PI's (or Co-I's) needs and request, and the resulting expansion of research time devoted to the funded project (increased number of hours for research) may be subject to later inspection in relation to the grant spending. In the event that the buyout expenditure is found to be used improperly (e.g., the increase in hours devoted to the funded project is not verified), an order to return the delivered grant may be issued. Therefore, the research institution should ensure the appropriate implementation of the buyout system.

2) Expenditures that cannot be covered by KAKENHI

The following kinds of spending cannot be covered by KAKENHI:

A. Costs associated with buildings and other facilities (excluding expenditure for installations necessary for installation of research equipment purchased by the KAKENHI direct expense).

B. Expenditures for measures to deal with accidents or disasters that occurred during the implementation of funded project

C. Personnel cost/honoraria for the PI or Co-I(s)

D. Other expenditures that are apt to be covered by indirect expense*

* Indirect expense which amounts to 30% of the direct expense, is intended for use by the research institution in covering expenditures needed by the research institution for the management and other things associated with the implementation of the funded project. Indirect expense will be placed for all the research categories of this call for proposals. Applicant does not need to state the indirect expense in his/her Research Proposal Document.

4. Selection by the Applicant of a Desired Review Section in the Review Process

1) Application to the categories "Scientific Research (Scientific Research (B/C)),"" Challenging Research" and "Early-Career Scientists"

The applicant should **select one of the review sections** from Attached Table 2 "The Review Section Table for Grants-in-Aid for Scientific Research" (see page 99) as a suggested review section for his/her research proposal.

Review Sections and Review Methods are different for different research categories to which the research proposal in question is submitted as shown in the table below.

[Review Section and Review Method for "Scientific Research (B/C)" "Challenging Research (Pioneering/Exploratory)" and "Early-Career Scientists"]

Research Category	Review Section	Review Method
Challenging Research (Pioneering)	**Medium-sized Section**	**Comprehensive Review (Document reviews and Panel reviews)**
Challenging Research (Exploratory)		**Two-Stage Document Review**

Scientific Research (B)	**Basic Section***	**Two-Stage Document Review**
Scientific Research (C)	**Basic Section**	**Two-Stage Document Review**
Early-Career Scientists	**Basic Section**	**Two-Stage Document Review**

* For some Basic Sections under Scientific Research (B), joint reviews will be conducted by consolidating several Basic Sections.

4. Completion of Research Ethics Education Coursework, etc.

Principal Investigator (PI) and Co-Investigator(Co-I) taking part in a research funded by KAKENHI, are requested to have completed properly the following procedures including research ethics, by the time they submit the formal application for grant delivery of a newly adopted research project in the FY2023 Grants-in-Aid for Scientific Research, and upon the formal application for a grant delivery, it shall be confirmed through the electronic application system whether they will have taken the research ethics education coursework, etc.

If a PI or Co-I completed the research ethics related procedures in the past, or has moved from the research institution at which he/she completed the procedure, he/she should check with the administrative section of his/her current institution for the validity of the procedure he/she conducted in the past.

[Actions to be taken by the Principal Investigator]

- The PI must either read through and learn the teaching materials by him/herself concerning the research ethics education coursework such as “For the Sound Development of Science - The Attitude of a Conscientious Scientist” published by the JSPS Editorial Committee of “For the Sound Development of Science, the “e-Learning Course on Research Ethics [eL CoRE] or “APRIN e-learning program (eAPRIN),” etc., or attend a lecture on research ethics conducted by research institutions based on the “Guidelines for Responding to Misconduct in Research” (adopted by MEXT on August 26, 2014), by the time of the formal application for grant delivery.
- The PI must understand thoroughly and exercise the proper research practices in conducting his/her research, from amongst the contents of both the Statement “Code of Conduct for Scientists -Revised Version-” by the Science Council of Japan and the booklet “For the Sound Development of Science -The Attitude of a Conscientious Scientist-” issued by JSPS, by the time of the formal application for grant delivery.
- From each Co-Investigator-to-be, the PI must
  (i) obtain a consent of participation in the research project as a Co-I through the electronic application system and also a consent expressing “the completion of a seminar attendance or other kinds of coursework relevant to research ethics by the time of the formal application for the grant delivery of the research project in question,” by the time of submitting (sending) the Research Proposal Document to the research institution which the PI belongs to, and;
  (ii) ascertain that the Co-I has actually completed the coursework such as an attendance at the lecture on research ethics by the time of the formal application for the grant delivery.

[Actions to be taken by the Co-Investigator-to-be]

- The Co-I must provide the PI with both a consent of the participation in the research project as a Co-I via the electronic application system and a consent expressing “the completion of a seminar

attendance or other kinds of coursework relevant to research ethics by the time of the formal application for the grant delivery of the research project in question."

- The Co-I must either read through and learn the teaching materials by him/herself concerning the research ethics education coursework such as "For the Sound Development of Science - The Attitude of a Conscientious Scientist" published by the JSPS Editorial Committee of "For the Sound Development of Science," the "e-Learning Course on Research Ethics [eL CoRE]" or "APRIN e-learning program (eAPRIN)," etc., or attend a lecture on research ethics conducted by research institutes based on "Guidelines for Responding to Misconduct in Research" (adopted by MEXT on August 26, 2014), and report the PI to the effect by the time of the formal application for the grant delivery by the PI.
- The Co-I must understand thoroughly and exercise the proper research practices in conducting their research, from amongst the contents of both the statement "Code of Conduct for Scientists -Revised Version-" by the Science Council of Japan and the booklet "For the Sound Development of Science - The Attitude of a Conscientious Scientist-" issued by JSPS, and report the PI to the effect that he/she has done, by the time of the formal application for the grant delivery by the PI.

5. Registration of the Researcher Information in "researchmap"

The "researchmap (https://researchmap.jp/)" is the Japan's largest researcher information database as a general guide to Japanese researchers. The information on the research achievements registered in the researchmap is ready to be openly available over the Internet and the database itself is linked to the e-Rad, many university faculty databases and so on. The Japanese Government as a whole is going to further utilize the researchmap.

Furthermore, since the posted information in the researchmap and/or the Grants-in-Aid for Scientific Research Database (KAKEN) is to be handled as a reference according to the necessity in the review of the KAKENHI applications, the registration of the researcher information into the researchmap is encouraged. In addition, when doing so, make sure to register the "Researcher Number" because the posted information is to be searched with the "Researcher Number" when referring to the posted information in the researchmap in the course of the review.

< Inquiries >

Service Support Center (in charge of the "researchmap")
Department for Information Infrastructure
Japan Science and Technology Agency
Web inquiry form: https://researchmap.jp/public/inquiry/

6. Participation in the KAKENHI Peer-review Process

The Grants-in-Aid for Scientific Research-KAKENHI- adopts a peer-review process in which the researchers selected from their own community engaged themselves in the assessment and reviewing of each research proposals on the basis of its scientific merit. The KAKENHI review is conducted thanks to the participation of more than 8,000 researchers as reviewers. The peer review forms the basis of the autonomy of academic community and plays an important role in ensuring quality of scientific research and its improvement. The review of applications is carried out with the constructive and mutually critical spirit of scientists and based on the purely academic value. It is no exaggeration to say that the KAKENHI review system is indispensable in supporting Japan's scientific research into the future among other research funds.

The Grants-in-Aid for Scientific Research (KAKENHI) program is supported by researchers who have responsibilities not only to conduct the funded research projects as applicants and grant recipients but also as a reviewers. It is important for researchers to find out excellent research proposals as reviewers in order to support the scientific research as is the case of putting out excellent research results with KAKENHI funds. It is expected that the above-stated understanding is share in the academic community. Furthermore, participating in the review process has an aspect of fostering researchers through enhancing their capability to conduct the objective and academic assessments based on the various views of fellow reviewers leading up to broaden their horizons.

In order to support the peer-review system of KAKENHI by the whole body of researchers by appropriately sharing the burden of proposal review without putting an extra load on some researchers. The researchers' positive participation in the review process is well appreciated when they are requested to become the KAKENHI reviewer by JSPS or MEXT in the future.

JSPS has registered the Principal Investigators' information including their names and affiliated research institutions in the Database of Review Committee Candidate (141,000 entries as of FY2021) and has utilized it so as to select the fair and excellent reviewers. In order to keep the information in this Database updated at all times, JSPS makes a request every year to update the registered information through your affiliated research institutions. Kindly cooperate in updating the information in accordance with the Spending Rules for researchers (supplementary conditions or funding conditions).

IV. Instructions for Grant Recipients

1. Handling of a Research Project to be Continued in FY2023 (hereinafter referred to as "continued research project")

For a continued research project, the PI does not need to submit any application form afresh. However, he/she has to prepare and submit the necessary documents, including the form of the formal application for grant delivery, after receiving a notification of the provisional grant decision. It is in principle not permitted to withdraw a continued KAKENHI project in order to apply for a new KAKENHI grant, however handling of the case differ for different research categories, as described below.

(1) Specially Promoted Research

1) A case in which the PI intends to make a major change in the research plan of a continued research project

If the PI intends to make a major change in the research plan of the continued project, he/she needs to submit a revised Research Proposal Document reflecting the intended change. The procedure for submission of the revised Research Proposal Document is the same as for "Preparation of the KAKENHI Application Form (Research Proposal Document)" (see page 54) which he/she should refer to. When preparing the revised Research Proposal Document, the same review section as that at the time of adoption should be selected.

Note that, in this case, the revised Research Proposal Document shall be reviewed afresh. It may happen that the proposed change is not approved. In that case, the provisional grant money to be delivered in FY2023 on will not be delivered.

Here, "major changes" in the research plan in this context include (i) a change in the research objective or a change in the title of the research project, (ii) a change in the annual delivery plan of the grant in FY2023 and after (a change by use of the Adjustment Funds is excluded), (iii) a change in the overall grant (increase or decrease) or a shortening of the research period, etc. In order to know whether the change the PI intends to make falls under these categories, he/she should consult in advance with the Scientific Research Aid Division II of the Research Program Department via his/her research institution (see "Inquiries" on page 162).

(2) Research Categories Other than Specially Promoted Research

(1) A case in which the PI intends to make a major change in the research plan of a continued research project

Concerning research fields other than Scientific Research (B/C) (application section "Generative Research Field"), if the PI intends to make a major change in the research plan of the continued project, he/she needs to submit a revised Research Proposal Document. For specifics concerning the application procedure, he/she should refer to the "Preparation of the KAKENHI Application Form (Research Proposal Document)" (see page 54). In principle, an application asking for a

grant increase for a continued research project will not be accepted.

It is reminded that changes in the annual plan of grant spending within the framework allowed for the KAKENHI (Multi-year Fund), the fund-based-grant type of KAKENHI (Partial Multi-year Fund) and KAKENHI (Series of Single-year Grants) using the Adjustment Funds. Therefore, a change in the annual plan of the grant in FY2023 and after does not fall under the "major changes" concerned here. Note that, when a revised Research Proposal Document with a major change in the research plan is submitted, it shall be reviewed afresh. It may happen that the proposed change is not approved. In that case, the provisional grant to be delivered in FY2023 on will not be delivered. In order to know whether the change the PI intends to make falls under these categories he/she should consult in advance with the Research Aid Division I of the Research Program Department (see "Inquiries" on page 162).

(2) A case in which a continued research project has proceeded beyond expectation, and the original research goal has already been reached

If the PI of the continued research project decides that his/her project proceeded beyond expectation and research goal has already been reached, and he/she intends to pursue a new research development(*) by transferring to another research category, he/she may opt to apply for a new KAKENHI grant, after submitting a "Notice of Completion of Research Project" and a "Statement of Reason" (refer to the supplementary edition "Forms/Procedures for Preparing and Entering a Research Proposal Document") by Monday, September 5, 2022. (Documents that arrive later will not be accepted.) Please note that the above is the deadline for contacting the Research Aid Division I when submitting the FY2023 call for proposals for "Scientific Research (B/C)", "Challenging Research (Pioneering/Exploratory)", and "Early-Career Scientists".

Note that, if the content of the "Statement of Reason" is deemed inappropriate by the review panel, the new KAKENHI proposal is excluded from the review. Even in this case, the grant for the continued research project of which the PI has already filed the "Notice of Completion of Research Project" cannot be asked for FY2023 or after.

(*) Here, the "case in which the PI intends to pursue a new research development by transferring to another research category" refers to such cases as changing over from a continued research project in the "Scientific Research (C)" category to a new proposal in the "Scientific Research (B)" category. Changing over to the same research category, for example from "Scientific Research (C) (General)" to "Scientific Research (C) (General)" is not acceptable. Also note that changing over to the "Transformative Research Areas" category or the "Scientific Research on Innovative Areas (Research in a Proposed Research Area)" category is not acceptable.

2. Handling of Continued Research Projects Whose PI Fails to Submit the Report on the Research Achievements of his/her Other KAKENHI Project

As is the case for new proposal submissions, no KAKENHI will be delivered to a researcher who

fails to submit the Report on the Research Achievements at the end of the research period, without any justifiable reason. In such cases, a cancellation of the official grant decision and an order for refund of the grant may be issued. In addition, the information such as the name of the research institution of the said researcher may be made public.

Furthermore, if a researcher fails to submit the scheduled Report on the Research Achievements without any justifiable reason, then he/she may be ordered to suspend the spending of his/her other KAKENHI grant(s) for the same fiscal year.

3. Completion of Research Ethics Education Coursework, etc.

The PI should check with the administrative section of his/her institution about the rules concerning the research ethics education coursework, etc. For a continued research project upon the formal application for a grant delivery or request for payment in every fiscal year, it shall be confirmed through the electronic application system whether the PI and Co-I(s) have taken the research ethics education coursework, etc.

In case that the PI intends to add a new Co-I to the continued project in FY2023, the PI has to obtain a consent to become a Co-I from the Co-I-to-be via the electronic application system in advance. In this case, the Co-I-to-be has to complete the followings prior to the formal application for grant delivery and report to the PI what he/she has done. (Or, in case the grant has been already delivered, he/she has to do the followings by the time the "application for approval of change of the Co-Investigator" is submitted by the PI to JSPS.).

- Either to read through and learn the teaching materials by oneself concerning the research ethics education coursework such as "For the Sound Development of Science - The Attitude of a Conscientious Scientist" published by the JSPS Editorial Committee of "For the Sound Development of Science, the "e-Learning Course on Research Ethics [eL CoRE]" or "APRIN e-learning program (eAPRIN)," etc., or to attend a lecture on research ethics conducted by research institutions based on "Guidelines for Responding to Misconduct in Research" (adopted by MEXT on August 26, 2014) .
- To understand thoroughly and to exercise the proper research practices in conducting their research, from amongst the contents of both the statement "Code of Conduct for Scientists -Revised Version-" by the Science Council of Japan and the booklet "For the Sound Development of Science -The Attitude of a Conscientious Scientist-" issued by JSPS.

V. Instructions for Administrative Staff of Research Institution

1. Sharing the Purpose and Aim of the KAKENHI System

The KAKENHI provides a financial support for the creative and pioneering researches based on the original ideas of researchers.

Review of the submitted research proposals is conducted by the peer review process, in which researchers selected from their own community engage themselves in the assessment and reviewing of each research proposals on the basis of its scientific merit. The KAKENHI review process is based on the cooperation of more than 8,000 reviewers.

While the KAKENHI review process has been continually improved by, for instance, the introduction of new review methods from the FY2018 grant, the growing needs of KAKENHI have resulted in the number of new applications exceeding one hundred thousand in recent years. The workload on the researchers who are cooperating as reviewers is getting heavier along with the increase in the number of applications. Pressing concern is that if the burden on the reviewers keeps increasing to be excessive, it may seriously affect the reviewers' own research and educational activities, and may also result in deterioration of the quality of the review process. One of the possible factors for the recent increase in the application number may be attributed to the fact that some research institutions seem to set the KAKENHI application as one of their organizational activity indicators. Application for the KAKENHI grant per se should be made on the basis of the initiative of the researchers. Therefore, such action on the part of research institutions as to set quota to the constituent researchers is undesirable.

All research institutions are requested to share and disseminate within themselves the primary purpose and aim of the KAKENHI system afresh.

2. 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 the 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 (MEXT).

1) Universities and inter-university research institutes
2) MEXT facilities and other institutions engaged in scientific research
3) Technical colleges
4) Institutions designated by MEXT (see note below)

Note:
In order to become a Research Institution, institutions not falling under 1) to 3) first need to receive the designation by MEXT. Therefore, the institutions should consult with the Scientific Research Aid Division of the Research Promotion Bureau of MEXT.
Moreover, if changes in one of the following items have been scheduled, institutions that have received the designation by MEXT and already have been recognized as a research institution should promptly report the content of these changes to the Scientific Research Aid Division of the Research Promotion Bureau of MEXT.

(i) Abolition or dissolution of the research institution
(ii) Name and address of the research institution, and name of the representative
(iii) 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 who belong to such institutions should consider that, in order to conduct research activities using the KAKENHI, **the institutions should meet the requirements mentioned below**.

< Requirements >

(i) The research institution must authorize the research project for which the KAKENHI is granted, as its proper activity.

(ii) The research institution must take responsibility for management and accounting of the KAKENHI delivered to its researcher(s).

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

Researchers who intend to apply for KAKENHI should meet the requirements (i) and (ii) below. Therefore, they should sufficiently verify these requirements with the research institution.

Researchers who intend to apply for KAKENHI should meet the following application eligibility. (See page 31)

(i) At the time of the proposal submission, a researcher needs to have been approved by his/her research institution as an eligible researcher who meets the Requirements 1) , 2) and 3) stated below, and have his/her Researcher Information properly registered in the e-Rad system as eligible for KAKENHI application.

< **Requirements >**

1) **The applicant must be an individual belonging to a research institution with job assignment including research activity within the said institution.** (Whether the job is paid/unpaid, or full-time/part-time is irrelevant. It is not a prerequisite of eligibility that the research activity constitutes the main part of his/her job.)

2) **The applicant must be actually engaged in research activity in his/her research institution.** (Those who are only engaged in research assisting jobs are ineligible.)

3) **The applicant must not be a graduate student or any other categories of student.** (However, an individual who has a position in a research institution with research activity as his/her main job (e.g., university teaching staff, researcher belonging to a company, etc.) and holds a student status at the same time is eligible.)

(ii) **The individual must not be categorized as ineligible for grant acquisition in the fiscal year subjected to the call for proposals, as a penalty for his/her improper grant spending, fraudulent grant acquisition, or research misconduct using the KAKENHI or other Competitive Research Funds.**

<Important point 1>

KAKENHI employee whose personnel cost is covered with the KAKENHI fund is generally bound by their employment contract to concentrate on the research work relevant to the employment-related work specified in his/her employment contracts. Therefore, such a KAKENHI employee cannot apply for his/her own KAKENHI project which is to be conducted within the working hours of his/her employment.

However, provided that he/she can clearly demarcate his/her own research hours from the working hours of employment and intends to conduct his/her own research project during the working hours on his/her own initiative, the KAKENHI employee can submit his/her own KAKENHI proposal, on the condition that the following points are verified by his/her research institution. In this case, he/she can apply as PI, or participate to other KAKENHI project(s) as Co-I.

- The KAKENHI employee is granted on his/her employment contract, to conduct research on his/her own initiative, besides the employment-related work.
- The employment-related work and the work devoted to the research on the KAKENHI employee's own initiative are clearly demarcated in regard to the working hours and the effort.
- The KAKENHI employee is able to secure enough research hours (besides the working hours for his/her employment-related work) to be allotted to his/her own KAKENHI project.

[Self-motivated research activities by an "early-career scientist" employed with KAKENHI]

A young researcher (*) who is employed with KAKENHI funds (KAKENHI employee) and meets the following conditions, may conduct his/her own research during the working hours assigned for the employment-related work, after going through the necessary procedures set by his/her research institution. He/she can apply for KAKENHI as a PI or become a Co-I.

(1) The young researcher desires on his/her own will to conduct his/her own research.
(2) The PI or Co-I (the employer of the young researcher) decides that the said research has a positive contribution to the promotion of the funded research project for which he/she is employed, and the research institution approves the decision.
(3) The PI or Co-I judges that the efforts to be spared by the young researcher to the said research is within the extent that do not cause any hindrance to the execution of the funded research project for which he/she is employed, and the research institution approves the judgement.

(The upper limit of the efforts to be spared to the self-motivated research is 20 percent of the efforts to be put into the funded research project for which he/she is employed.)

* In this context, "young researcher" is defined as an individual who is age 39 or under or less than 8 years after Ph.D. acquisition as of April 1 of each fiscal year, and whose job assignment includes research activities. When applying for Grants-in-Aid for Scientific Research (KAKENHI) he/she must meet the eligibility requirements for KAKENHI application.

Provided that the KAKENHI employer approves such self-motivated research activities in accordance with its funding resources (project) rules, if a researcher had originally met the eligibility requirements for KAKENHI's self-motivated research activities at the time of his/her application or participation, he/she may apply for KAKENHI and continue to engage in the adopted research project even if, during the project period, he/she is no longer age 39 or under or less than 8 years after Ph.D. acquisition. If there are changes to the funding resources (project) of the KAKENHI employer, the researcher must abide by the new funding resources (project) rules and reobtain the approval to conduct self-motivated research activities as a young researcher at the time the of the changing of funding resources.

(Reference) Views on the introduction of self-motivated research activities by KAKENHI employee

Attachment to the "Proposals of the Grants-in-Aid for Scientific Research (KAKENHI) in Fiscal Year 2020 " (March 19, 2020) (Excerpt)
https://www.jsps.go.jp/j-grantsinaid/06_jsps_info/g_200316/index.html

Grants-in-Aid for Scientific Research (hereinafter referred to as "KAKENHI") is a funding scheme that is intended to promote development of scientific research (based on original ideas of researchers), encompassing basic to applied researches in all fields ranging from humanities and social sciences to natural sciences. Scientific research is a source of innovation *i.e.*, value creation based on new knowledge and has a vital role in nurturing human resources for leading a knowledge-based society broadly. It is particularly important to foster young scientists who are responsible for the next generation in order that the scientific research may sustainably exercise its role in the society.

It enable young researchers employed with a KAKENHI grant to conduct self-motivated research activities (including research activities with other research funds and activities helping research/management capacity building; hereinafter the same). Allowing them to conduct research activities in an independent and free research environment contributes not only to fostering young researchers, but also to the further development of the KAKENHI projects of their research institutions through research based on their freewheeling thinking and to the development of scientific research the entire country. Therefore, the concept of self-motivated research activities by young researchers is introduced in the KAKENHI scheme in this call for proposals.

For details, refer to the following:
"Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (Revised on December 18, 2020, Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds)
https://www.mext.go.jp/a_menu/shinkou/torikumi/1385716_00001.htm

<Important point 2>

If a JSPS Research Fellow (SPD, PD, RPD, or CPD) meets the application requirements set forth above at the research institution which he/she registers as host research institution, **he/she can also apply for the following research categories other than the "Grant-in-Aid for JSPS Fellows," but only from the registered host research institution.** Unlike applying for KAKENHI as PI, he/she may apply for any of these research categories so long as he/she takes part in a KAKENHI proposal as Co-I.

i) Publicly Offered Research of Transformative Research Areas (A)
ii) Scientific Research (B/C)
iii) Challenging Research (Exploratory)
iv) Early-Career Scientists
v) Fund for the Promotion of Joint International Research (Fostering Joint International Research (A)) (Excluding CPD)

Moreover, research institutions should bear in mind that JSPS Research Fellows (DC), Overseas JSPS Fellows, and students including graduate 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.

(3) Confirmation of the Researcher Information Registered in the e-Rad System

In addition to the Principal Investigator who intends to apply, the Co-Investigator who makes up the Project Members should be limited to whom the researcher information has been registered in e-Rad as "Eligible to Apply for KAKENHI" when research institution submits (sends) the Research Proposal Document to JSPS.

Regarding the registration (update) of the researcher information necessary when applying, the administrative staff 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 the applicant has already been included in the researcher list of the research institution, he/she needs to register the correct information on the researcher list.)

For specifics on the method of registration, administrative staff of the research institution should verify the "Manual for Research Institutions to which the Researchers belong (for Research Institution Office Representatives and for Research Institution Office Workers)."

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

However, since Research Proposal Document will not be accepted after the deadline for submission of Research Proposal Document, applicants should complete the registration (update) of the researcher information early, in order to have sufficient time to submit 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.

*** On the entry of "Date of Ph.D. Acquisition" in the e-Rad system for those applying for the "Early-Career Scientists" category**

The eligibility for application to the "Early-Career Scientists" category is based on "the number of years after acquiring Ph.D." (See page 24) The verification of the eligibility of an applicant will be made by the registered information of the "Date of Ph.D. Acquisition" in the e-Rad system.
The applicant for the "Early-Carrier Scientists" category, will select one of the classifications for application eligibility given below, when he/she prepares a research proposal document on the KAKENHI Electronic Application System.

(1) An applicant who is less than 8 years after the acquisition of his/her Ph.D. as of April 1, 2023. (A researcher who acquired Ph.D. between April 2, 2015 and the time of proposal submission)
(2) An applicant who does not carry a degree at the time of proposal submission, but is in prospect of acquire Ph.D. by April 1, 2023.
(3) An applicant who is deemed less than 8 years after acquisition of his/her Ph.D. as of April 1, 2023 by exempting (*) the period(s) of childcare leave, etc. (prenatal/postpartum break, childcare leave).
(*) Calculate the sum total of the leave periods, round up the total period to the fiscal year unit and then subtract it from the number of years after Ph.D. acquisition.
(Example: If the applicant has taken 6-month childcare leave three times, the fiscal years to be subtracted will be 2 (1 year and 6 months → 2 fiscal years).)

An applicant with the eligibility in the classification (1) or (3) must register the "Date of Ph.D. Acquisition" in the e-Rad system at the time of proposal submission. Since the registration to the e-Rad system cannot be made by the applicant him/herself, the applicant should request the administrative section of his/her research institution to register the Date of Ph.D. Acquisition in the e-Rad system in time for the proposal submission. If the applicant has more than one Ph.D. degree, enter the first acquisition date.
For details on registration to the e-Rad system and the eligibility for the "Early-Career Scientists" category, refer to "Regarding the registration work to the Cross-ministerial Research and Development Management System (e-Rad) in connection with the change of the application requirements of Grants-in-Aid for Scientific Research (Early-Career Scientists)" on July 6, 2017.

URL: https://www.mext.go.jp/a_menu/shinkou/hojyo/1385136_00005.htm

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

The "Grant-in-Aid for Research Activity Start-up" is aimed at supporting researchers who are not able to apply for this round of call for proposals, such as those who are newly appointed to a research position, and those who are returning from their leave of absence for childcare, etc. after the regular submission deadline.
The FY2023 Call for Proposals in this category is scheduled for March 2023, and the provisional conditions of the eligibility for application are as follows:

(A) An individual who obtains eligibility for KAKENHI application on or after October 1, 2022, and has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS.

(B) An individual who has not submitted an application under the call for proposals for the following research categories(*) announced by MEXT and JSPS because he/she was on maternity leave or childcare leave in FY2022.

(*) FY2023 Grants-in-Aid for Specially Promoted Research, Transformative Research Areas, Scientific Research, Challenging Research, and Early-Career Scientists

(For details, the Application Procedures for the "Grant-in-Aid for Research Activity Start-up" category to be announced in March 2023 should be referred to.)

Since the registration to the e-Rad system is handled by the research institution, researchers who may come to fall under the category (A) above, should act accordingly by contacting the administrative section of his/her prospective research institution.

(Note) JSPS Research Fellows (SPD, PD, RPD, or CPD) are not eligible for application to the "Grant-in-Aid for Research Activity Start-up," even if they satisfy the above application conditions.

(4) Obtainment of an ID and a Password for the Researcher Belonging to the Research Institution

In order to apply for KAKENHI, researchers should perform the procedures, by accessing the "Electronic Application System," he/she should retain an ID and a Password for e-Rad.

For this reason, the research institution should verify whether researchers who intend to apply have an ID and a Password, or not.

In the case where there is a researcher who intends to apply and who has neither ID nor Password, the research institution should provide him/her with an ID and a password in accordance with the following procedure.

i) In order to provide the researcher with an ID and a Password, the research institution needs to have an ID and a Password for use of the research institution. 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.

It may take up to 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."

Notes:

*1. Please refer to "How to Apply for the Registration on Research Institutions" (URL: https://www.e-rad.go.jp/organ/entry.html) on the e-Rad website for information on downloading an application form for the ID and password for e-Rad.

*2. Research institutions that already obtained an ID and a password for e-Rad issued do not need to obtain it again.

*3. It is not necessary to obtain an ID and a password for e-Rad for each research category of the KAKENHI.

ii) After obtaining an ID and a Password for use of the research institution, the administrative staff in the research institution should provide an ID and a password to the researcher who is planning to apply as a Principal Investigator and a Co-Investigator. The ID and password for each researcher is issued through registration of the researcher information in e-Rad. Please refer to the "Manual for Research Institutions" (for Research Institution Office Representatives and for Research Institution Office Workers: the section of "Procedures for Researchers") for information on the concrete way how to provide them.

Notes:

*1. When providing the login ID and password, research institutions must make it known to researchers that they must strictly protect the login ID and password in order to prevent them from being disclosed to others.

*2. Once the ID and the password for the researcher have been provided they can be used, even if the research institution changes.
*3. Please be sure to obtain and use the latest version of the Operation Manual.

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

When implementing the adopted research projects with KAKENHI grant the research institutions must comply with the content of the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" (Adopted by the Minister of MEXT. Revised on February 1, 2021.) (hereinafter referred to as "Guidelines on Public Research Funds"), they must set up a system of the management and audit for implementing the public research funds and report the state of implementation and other matters by submitting a "Self-Assessment Checklist on the Improvement of the System based on the Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" (hereinafter referred to as "Self-Assessment Checklist on the Improvement of the System").

Therefore, "those research institutions which Principal Investigators and Co-Investigators applying for KAKENHI in FY2023 belong to" and "those research institutions which Principal Investigators and Co-Investigators continuing research projects using KAKENHI are scheduled to belong to in FY2023" **must submit in accordance with the procedure and forms posted on the MEXT the "Self-Assessment Checklist on the Improvement of the System" to the Office of Competitive Research Funding Administration, Research Environment Division, Science and Technology Policy Bureau of the MEXT by December 1, 2022 (Thursday) via e-Rad.**

For details, refer to the website (URL : https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm)

If the "Self-Assessment Checklist on the Improvement of the System" has already been submitted in April 2022 or later, it is not necessary to submit it again.

Researchers affiliated to a research institution which has not turned in the said checklist cannot receive the official grant decision.

Note: When using e-Rad, an ID and a password for the research institution are necessary.

< Inquiries >

(Concerning forms and submission of the Guidelines on Public Research Funds)

Office of Competitive Research Funding Administration, Research Environment Division,
Science and Technology Policy Bureau, MEXT
Telephone: 03-5253-4111 (ext. 3866, 3827)
E-mail: kenkyuhi@mext.go.jp
URL: https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm

(Concerning the research institute e-Rad registration)

Helpdesk of the Cross-ministerial Research and Development Management System (e-Rad) of MEXT

Telephone: 0570-057-060 (Navi Dial)

Office hours: 9:00-18:00, except on Saturdays, Sundays, National Holidays and the New Year Holidays (from December 29 until January 3)

URL: https://www.e-rad.go.jp/organ/entry.html

(Time period when e-Rad is available for use)

Monday to Sunday 00:00 - 24:00 (in operation 24 hours a day, 365 days a year)

However, even during the above-mentioned time period, it may happen that the operation of e-Rad is disrupted or suspended, when maintenance and inspection is being carried out. If the operation is scheduled to be disrupted or suspended, this will be announced beforehand on the portal site.

(6) Submission of the "Checklist Pertaining to the Current Status" Based on the "Guidelines for Responding to Research Misconduct"

When implementing the research projects with KAKENHI grant the research institutions must comply with the content of the "Guidelines for Responding to Research Misconduct" (Adopted by the Minister of MEXT on 26 August 2014) (hereinafter referred to as "Guidelines on Research Misconduct") and submit a "Checklist Pertaining to the Current Status based on the Guidelines for Responding to Research Misconduct" (hereinafter referred to as "Checklist on the Research Misconduct").

Therefore "those research institutions which the Principal Investigators and Co-investigators applying for KAKENHI in FY2023 belong to" and "those research institutions which Principal Investigators and Co-Investigators continuing research projects using KAKENHI are scheduled to belong to in FY2023" **must submit in accordance with the procedure and forms posted on MEXT the "Checklist on the Research Misconduct" to the Office for Research Integrity Promotion, Research Environment Division, Science and Technology Policy Bureau of MEXT by September 30, 2022 (Friday) via e-Rad.**

For details, refer to the website (URL : https://www.mext.go.jp/a_menu/jinzai/fusei/1420301_00003.html)

If the "Checklist on the Research Misconduct" has already been submitted in April 2022 or later it is not necessary to submit it again.

Researchers affiliated to a research institution which has not turned in the said checklist cannot receive the official grant decision.

*Please note that while the "Checklist on the Research Misconduct" is the same in using e-Rad for submission with the "Self-Assessment Checklist on the Improvement of the System," the submission destination is different. Both checklists must be submitted.

Note: When using e-Rad, an ID and a password for the research institution are necessary.

< Inquiries >

(Concerning the format and submission of Guidelines for Responding to Research Misconduct)

* Differs from the contact information for the Guidelines on Public Research Funds.

Office for Research Integrity Promotion, Research Environment Division, Science and Technology Policy Bureau, MEXT

Telephone: 03-6734-3874

E-mail: jinken@mext.go.jp

URL：https://www.mext.go.jp/a_menu/jinzai/fusei/index.htm

(Concerning the research institute e-Rad registration)

Helpdesk of the Cross-ministerial Research and Development Management System (e-Rad) of MEXT

Telephone: 0570-057-060 (Navi Dial)

Office hours: 9:00-18:00, except on Saturdays, Sundays, National Holidays and the New Year Holidays (from December 29 until January 3)

URL: https://www.e-rad.go.jp/organ/entry.html

(Time period when e-Rad is available for use)

Monday to Sunday 00:00 - 24:00 (in operation 24 hours a day, 365 days a year)

Even during the above-mentioned time period, the operation of e-Rad may be disrupted or suspended, when maintenance and inspection is being carried out. If the operation is scheduled to be disrupted or suspended, this will be announced beforehand on the portal site.

(7) Implementation of a Research Ethics Education Coursework Based on the "Guidelines on Research Misconduct," etc.

Principal Investigators and Co-Investigators taking part in a new research project have to complete followings before the formal application for grant delivery.

- Either to read through and learn the teaching materials by oneself concerning the research ethics education coursework such as "For the Sound Development of Science -The Attitude of a Conscientious Scientist-" (JSPS Editing Committee of "For the Sound Development of Science"), the "e-Learning Course on Research Ethics (eL CoRE)," the "APRIN e-learning program (eAPRIN)," etc., or to attend a lecture on research ethics conducted by research institutions based on the "Guidelines on Research Misconduct."
- To understand thoroughly and to exercise the proper research practices in conducting their research, from amongst the contents of both the Statement "Code of Conduct for Scientists - Revised Version -" by the Science Council of Japan and the booklet "For the Sound Development of Science - The Attitude of a Conscientious Scientist -" issued by JSPS.

To that end, each research institution is requested to disseminate broadly what the researchers should consider, in conducting of their researches as well as carrying out an ethics education in research training session based on the Guidelines on Research Misconduct.

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

The research institution to which researchers belong has to collect and submit the report on the research achievements. If the research institution has failed, without justifiable reason, to submit the report on the research achievements at the end of the research period, 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 delivered to researchers who do not submit the report on the research achievements at the end of the research period, without good reason. Moreover, it may happen that the official grant decision to the researcher is cancelled, that an order to return the grant is issued, or that the information such as the name of the research institute the said researcher belongs to is disclosed in public.

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

(9)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 belonging to it. JSPS would especially like to request the dispersion of information on the items listed in the Application Procedures and the submission deadlines of Research Proposal Document, in order to avoid potential misunderstandings.

(10) Ensuring Research Integrity Among Research Institutions

In order to promote the creation of science, technology, and innovation in Japan, we must continue to strengthen overseas joint research with various partners based on the principle of open science. At the same time, in light of newly emerging risks as a consequence of the globalization and openness of research activities in the recent years, there is a growing concern that the values of openness and transparency which constitute the basis of the research environment will be lost and the danger of researchers unknowingly being trapped in conflict of interest or conflict of responsibilities. In such climate, it is vital for our country to build a globally reliable research environment to protect the values that constitute the basis of research environment while encouraging necessary global collaboration and international exchanges.

Therefore, it is vital for universities and research institutions, etc. to observe the “Policy on Measures to Ensure Research Integrity Against New Risks as a Consequence of the Globalization and Openness of Research Activities (April 27, 2021, Decision of Council for Science, Technology and Innovation)” and formulate relevant rules and systems to manage conflict of interests and conflict of responsibilities, etc., and to autonomously secure the soundness and fairness of research (research integrity) among researchers and at universities and research institutions, etc.

From such perspective, MEXT and JSPS check whether reasonable efforts can be secured while eliminating unreasonable duplication and excessive concentration of competitive research funds and ensuring transparency of research activities. In addition, MEXT and JSPS may make inquiries to affiliated institutions, as necessary, on the status of formulation of rules and status of identification and management of information as affiliated institution.

○ "Policy on Measures to Ensure Research Integrity Against New Risks as a Consequence of the Globalization and Openness of Research Activities (April 27, 2021, Decision of Council for Science, Technology and Innovation)"

URL: https://www8.cao.go.jp/cstp/tougosenryaku/integrity_housin.pdf

○ "Policy on Measures to Ensure Research Integrity Against New Risks as a Consequence of the Globalization and Openness of Research Activities (April 27, 2021, Decision of Council for Science, Technology and Innovation)"

URL: https://www8.cao.go.jp/cstp/tougosenryaku/integrity_housin.pdf

3. Issues that Need to Be Verified when Compiling the Application Forms (Preparing the Research Proposal Document)

The contents of the Research Proposal Document should be verified in each research institution, and all the Research Proposal Documents should be submitted to JSPS together. When doing so, special attention should be paid to the following points.

(1) Ascertainment of the Eligibility for KAKENHI Application

It should be verified whether the Principal Investigator and the Co-Investigator(s) listed in the Research Proposal Document are researchers who meet the requirements that are stipulated in the Application Procedures (see page 31), and also whether the researcher information is registered in e-Rad as "Eligible to Apply for KAKENHI."

Moreover, it should be verified certainly that they must not be categorized as ineligible for grant acquisition in FY2022 in KAKENHI and other competitive research funds, as a penalty for their improper grant spending, fraudulent grant acquisition, or research misconduct.

(2) Confirmation of the Researcher Information Registered in the e-Rad System

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

Moreover, even though applicant has already been included in the researcher list of the research institution, if there is any item such as the department placed, the position, or others that needs to be corrected, the applicant's information on the researcher list should be corrected. .

(3) Verification with the Principal Investigator

The research institution should verify whether the Principal Investigator and the Co-Investigator(s) who have been listed in the Research Proposal Document have completed the Research Proposal Document, after confirming the description in the column "II. Call for Proposals" in this Application Procedures for Grants-in-Aid for Scientific Research.

(4) The Process of the Participation of Co-Investigator in Project Members

A research institution should conduct the process such as giving a consent with regard to the researcher who belongs to it becoming a Co-Investigator via the electronic application system.

When the information on the Co-Investigator-to-be is presented to the research institution to which the Co-Investigator-to-be belongs via the electronic application system after the researcher who was requested to become a Co-Investigator from the Principal Investigator gave a consent to do so via the electronic application system, then the research institution need to give a consent to do so, etc. as well.

Since the Principal Investigator cannot submit (send) the Research Proposal Document to his/her research institution until the Co-Investigators-to-be's research institution gives a consent to do so, etc., the research institution should proceed with the consent process in time for the deadline of the submission.

* Please refer to the KAKENHI Electronic Application System Operation Manual (URL: https://www-shinsei.jsps.go.jp/kaken/topkakenhi/shinsei_ka.html) for the detailed information such as operating environment, operating method, and so on.

(5) Verification of the Application Forms

It should be verified whether the application format is in conformity with the prescribed format. As for the forms to be uploaded, in particular, verify not only the total number of pages but also the number of pages instructed for each column is met. For example neither following case 1 in which the total number of pages is different nor following case 2 in which the total number of pages is same but the number of pages instructed for each column are different are inconformity with prescribed format.

(Example) Forms to be Uploaded : Scientific Research (B) (Form S-13)

Unit: page(s)

	Number of page(s) of each column				Total Number of Pages
	"Research Objectives, Research Method, etc." Column	"Applicant's Ability to Conduct the Research and the Research Environment" Column	"Issues Relevant to Human Right Protection and Legal Compliance" Column	"Items to be Entered When New Application is Made in the Fiscal Year Previous to the Final Year of the Research Period of an On-Going KAKENHI Project" Column	
Correct Number of Pages	**5**	**2**	**1**	**1**	**9**

Incorrect Number Case 1	4	2	1	1	8
Incorrect Number Case 2	6	1	1	1	9

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

Research category Application Section	Research Proposal Document		
	Items to be entered in the Website (First part)	Forms to be uploaded (File ID)	Items to be entered in the Website (Second part)
Scientific Research (B)	To be entered in the electronic application system (title of research project, fundamental data on the research project such as total budget, data on the project members, etc.)	S-13	To be entered in the electronic application system (title of research project, fundamental data on the research project such as total budget, data on the project members, etc.)
Scientific Research (C)		S-14	
Challenging Research (Pioneering)		S-41-1 S-41-2	
Challenging Research (Exploratory)		S-42-1 S-42-2	
Early-Career Scientists		S-21	
Continued Research Project (in case of a major change in the research plan)		S-99	

4. Submission and Other Matters of the Research Proposal Document (Preparing the Research Proposal Document)

(1) The research institution should access the "Electronic Application System," using the ID and the password for e-Rad, obtain the information of the Research Proposal Document (PDF files) that the Principal Investigator(s) prepared, and verify their contents and other matters.

(2) The research institution should perform the "approval" process on all the Research Proposal Documents (PDF files) that has no mistakes in their contents. (Completed to submit (send) the Research Proposal Document (PDF files) to JSPS.) Moreover, it is not possible to make corrections or other modifications to the Research Proposal Document (PDF files) for which the research institution has already performed the "approval" process.

[The deadline for the submission of the Research Proposal Document is]

October 5, 2022 (Wednesday), 4:30 pm (This deadline should be strictly observed.)

Note 1: Research Proposal Document that is submitted (sent) after this deadline will not be accepted for any reason. Therefore, the documents should be submitted (sent) well in advance.

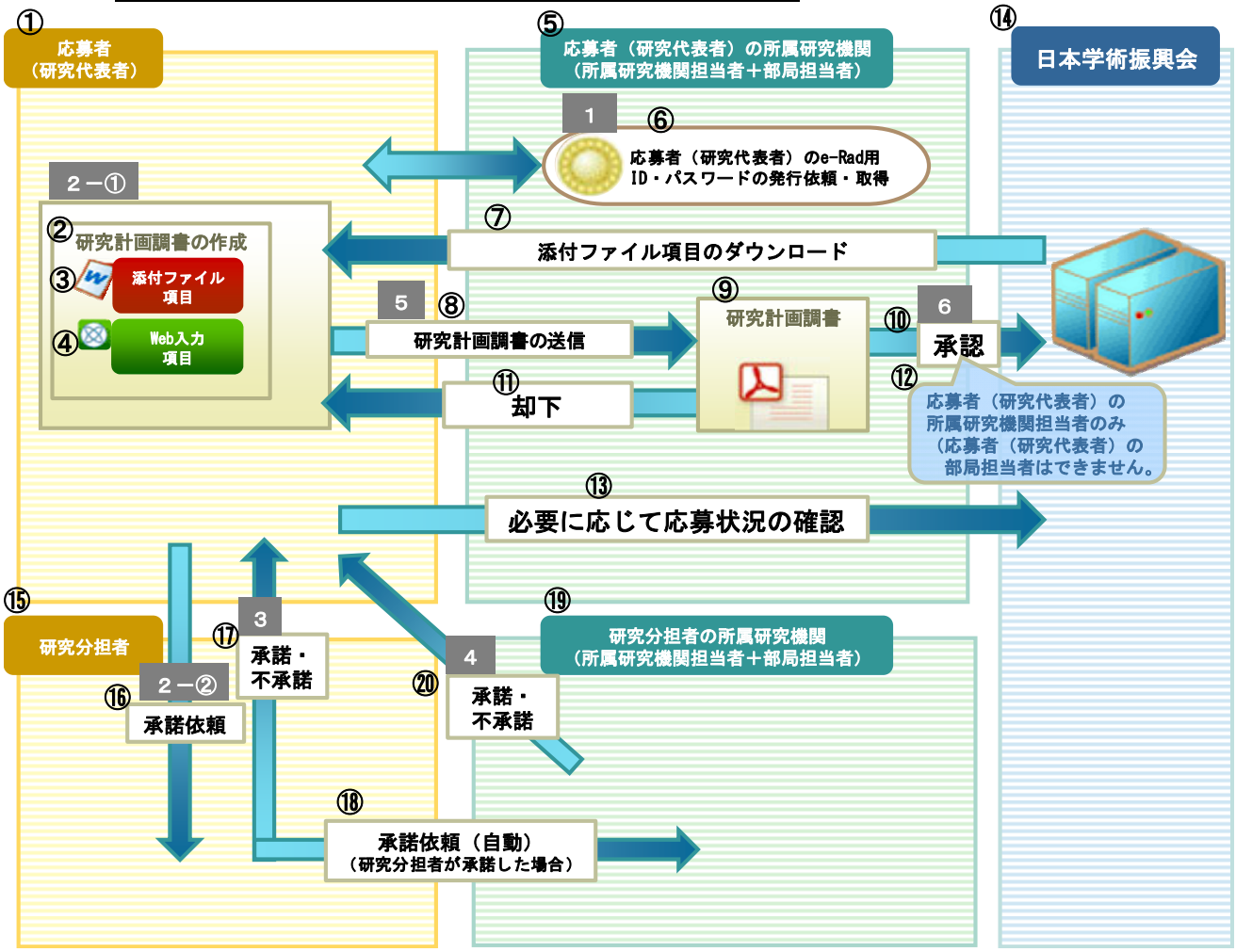
Note 2: After the submission (sending) of the application documents, it is not possible to make corrections or to re-submit them.

(3) The ID and the password which are used in the e-Rad are designed to verify 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 operating environment, procedure, etc. of the “Electronic Application System,” please refer to the “Operation Manual” at the website below.

URL: https://www-shinsei.jsps.go.jp/kaken/topkakenhi/shinsei_ka.html

Outline of the Electronic Application Procedures



① Applicant (Principal Investigator)
② Preparation of Research Proposal Document
③ Forms to be uploaded
④ Items to be entered in the website
⑤ The research institution to which the applicant (Principal Investigator) belongs (Administrative staff in the research institution + Administrative staff in the department)
⑥ Request for issue and acquisition of the applicant’s (Principal Investigators’) ID and password for e-Rad
⑦ Downloading of the forms to be uploaded and the Letter of Intent
⑧ Sending the Research Proposal Document
⑨ Research Proposal Document
⑩ Approval
⑪ Rejection

⑫ Only the administrative staff in the research institution to which the applicant (Principal Investigator) belongs (The administrative staff in the department of the applicant (Principal Investigator) cannot make an approval.)
⑬ Confirmation of the state of the application as necessary
⑭ JSPS
⑮ Co-Investigator
⑯ Request for consent
⑰ Consent/Dissent
⑱ Request automatically for consent (in case the Co-Investigator gave a consent)
⑲ The research institution to which the Co-Investigator belongs (Administrative staff in the research institution + Administrative staff in the department)
⑳ Consent/Dissent

[The administrative staff in the research institution to which the applicant (Principal Investigator) belongs]

1 The administrative staff in 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 accesses the "Electronic Application System," using the ID and the password he/she received, and prepares the Research Proposal Document (PDF file), by entering the "items to be entered" in the website and by uploading the "forms to be uploaded" as an attached file.

2 -② The applicant enters the researcher(s) whom the applicant wants to add to the project members and requests him/her to give a consent to become a Co-Investigator in the "Project Members List" column of the "Application Information Input" screen in the electronic application system.

[The researcher who is requested to become a Co-Investigator]

3 The researcher is requested to participate in the project as a Co-Investigator from the applicant (Principal Investigator) via the electronic application system and then he/she selects "Consent" or "Dissent" after confirming the contents of the consent.

[The administrative staff in the research institution to which the Co-Investigator-to-be belongs]

4 When the Co-Investigator-to-be gave a consent in the electronic application system, the research institution to which the Co-Investigator-to-be belongs selects "Consent/Confirm" or "Dissent."

[The applicant (Principal Investigator)]

5 If there are no mistakes in the Research Proposal Document (PDF file) and Letter of Intent the applicant prepared, he/she submits the Research Proposal Document (PDF file)

to the research institution to which he/she belongs, by performing the "completed and submission" process. Note that the applicant cannot submit (send) the Research Proposal Document until he/she obtains the consents from all the Co-Investigators and Co-Investigators' research institutions listed in the Project Members List of the Research Proposal Document.

[The administrative staff in the research institution to which the applicant (Principal Investigator) belongs]

6 By approving the Research Proposal Document (PDF file), etc. the administrative staff in the research institution to which the applicant belongs submits (sends) it to JSPS.

Moreover, if the Research Proposal Document (PDF file), etc. 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.

VI. Other Relevant Issues

1. Support through Platforms for Advanced Technologies and Research Resources

In order to respond effectively to the diverse needs of researchers of KAKENHI research projects, the Grant-in-Aid for Transformative Research Areas (A) - Platforms for Advanced Technologies and Research Resources forms a resource and technical support platform for research (hereinafter referred to as "Platform") under the close cooperation of relevant institutes with inter-university research institutes and Joint Usage/Research Centers, or International Joint Usage / Research Center as core institutes. Together with providing technical support towards individual research projects and providing advanced problem solving methods to researchers, it provides an integral promotion of cooperation between researchers, interdisciplinary integration, and human resources development.
Applications for technical support, etc. are open for each of the Platforms below where it concerns research projects carried out through KAKENHI. Researchers desiring technical support, etc. from each of the Platforms are requested to check their respective websites, etc. and actively apply.

* "Technical Support, etc." points to the sharing of equipment with researchers from a wide range of research fields, technical support and the collecting, conservation, and providing of resources (documents, data, experiment samples, specimen, etc.), and support for conservation techniques, etc.

"Advanced Technology Support Platform Program" has scientific value and an advanced nature through the combination of multiple facilities and equipment, and provides shared use of equipment and technical support to researchers in a wide variety of research areas.

"Research Platform Resource Support Program" collects, conserves, and supplies the resources that are the basis of research (documents, data, experiment samples, specimen, etc.) and also conducts support for conservation techniques, etc.

Area	Platform Name	Core Institution	Support Function
Advanced Technology Support Platform Program	Platform of Advanced Bioimaging Support (*)	National Institute for Physiological Sciences National Institute for Basic Biology	Advanced technical support and user training for : ・ Light microscopy ・ Electron microscopy ・ Magnetic resonance imaging ・ Imaging analysis
	Platform of Advanced Animal Model Support(*)	The Institute of Medical Science The University of Tokyo	Support for constructing animal models, Support for pathological analysis, Support for physiological analysis, and Support for molecular profiling
	Platform for Advanced Genome Science (*)	National Institute of Genetics	Advanced genome analysis (de novo genome sequencing; re-sequencing for genome variation detection; analysis of transcriptome, epigenome and metagenome; ultra-high sensitivity analysis for single cells, single molecules, etc.; big-data analysis and advanced bioinformatics; by using of the latest facilities and technologies)

Area	Platform Name	Core Institution	Support Function
Research Platform Resource Support Program	Platform of Supporting Cohort Study and Biospecimen Analysis (*)	The Institute of Medical Science, The University of Tokyo	Support for cohort study using bioresources, Support for maintaining and utilizing human brain resources, and Support using biospecimen
	Supply Platform of Short-lived Radioisotopes for Fundamental Research	Research Center for Nuclear Physics, Osaka University	Supply short-lived radioisotopes produced by accelerators for fundamental research in various scientific fields.

Also, Committee on Promoting Collaboration in Life Sciences that functions as a general information point and coordinator across the four Platforms marked with an asterisk (*) above is set up. (Core Institution: The Institute of Medical Science, The University of Tokyo)

Each Platform's website can be found in the links on the site below:
URL：https://www.mext.go.jp/a_menu/shinkou/hojyo/mext_01901.html

2. Promotion of the Shared Use of Research Equipment

In "Reform of Competitive Research Funds: Towards a Sustained Output of Research Achievements (Interim Summary)" (June 24, 2015, Competitive Research Fund Reform Review meeting) it was decided that, when the original research objectives were fully achieved, versatile and large equipment should, in principle, be shared.
The government also addresses the need to promote the implementation and common use of research facilities and equipment, to establish a framework for the introduction, renewal, and utilization of organizational research facilities (core facilities), and to formulate and publicize policies for the internal and external sharing of research facilities and equipment in the Comprehensive Package to Strengthen Research Capacity and Support Young Researchers (January 23, 2020, Council for Science, Technology, and Innovation) and the Sixth Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021).
With this in mind, when purchasing equipment with competitive research funds, please actively work on the use of equipment purchased with other research funds, and the purchase and shared use of equipment from several research funds where it concerns especially large and versatile equipment. Please also make ensure that sharing is possible within the rules of the said competitive research funds, and no obstacle is made to the execution of the research project.

○ "Reform of Competitive Research Funds: Towards a Sustained Output of Research Achievements (Interim Report)"
(June 24, 2015, Competitive Research Fund Reform Review meeting)
URL: https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm

○"The Sixth Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021)"
URL：https://www8.cao.go.jp/cstp/kihonkeikaku/6honbun.pdf

○Unified Rules for Administrative Procedures, Etc. Pertaining to Competitive Research Funds (March 5, 2021, Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Research Funds)
URL: https://www8.cao.go.jp/cstp/compefund/toitsu_rule_r30305.pdf

3. Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Approach Policy)

In the "Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Course of Action)" (Adopted by the Minister of State for Science and Technology Policy and the Executive Members of the Council for Science and Technology Policy on June 19, 2010) which was 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 who have received an allotment of public research funds amounting more than 30 million 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 for researchers who have received public research funds to ensure the proper implementation of the "Dialogue on Science and Technology with Citizens," 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 Specially Promoted Research, for which researchers receive a relatively high amount of research funds, and the interim/ex-post assessment of Scientific Research on Innovative Areas (Research in a Proposed Research Area). Therefore, based on the above-mentioned basic policy, researchers should disseminate the achievements of research funded with KAKENHI to society and citizens in an even more positive way.

4. Cooperation with the National Bioscience Database Center

The National Bioscience Database Center (URL: https://biosciencedbc.jp/) has been established in the Japan Science and Technology Agency (JST, a national research and development agency), 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 of the research achievements in the area of life science produced in Japan in the researcher community, 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. JSPS would like researchers to understand in advance that, in response to the 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.

Furthermore, the National Bioscience Database Center has developed guidelines for data on humans, in order to promote the sharing and use of data related to research in the area of life science, with due considerations to the protection of personal information.

NBDC Human Data Sharing Guidelines

URL: https://humandbs.biosciencedbc.jp/guidelines/

< Inquiries >

National Bioscience Database Center, Japan Science and Technology Agency

Telephone: 03-5214-8491

5. Inter-University Bio-Backup Project

The purpose of the Inter-University Bio-Backup Project (IBBP) is to “back up” biological genetic resources, which are indispensable research resources in various research areas, and to avoid damage or loss of biological genetic resources due to unforeseen accidents, disasters, etc. The project newly commenced from 2012.

In the National Institute for Basic Biology of the Inter-University Research Institute Corporation National Institutes of Natural Sciences, which is the core of this project, the Inter-University Bio-Backup Project for Basic Biology (IBBP Center, URL: http://www.nibb.ac.jp/ibbp/) has been established as a backup center for biological genetic resources. It is equipped with the newest equipment necessary for the backup of biological genetic resources.

Any researcher who belongs to a university or a research institution may apply for storage. Biological genetic resources that can be stored in the IBBP Center are samples that can be proliferated (amplified) or cryopreserved (for vegetable seeds, the refrigeration or deep-freezing preservation condition needs to be definite), and being not pathogenic is also a condition. Since backup is provided free of charge, researchers should make use of the IBBP Center.

< Inquiries >

Executive Office, IBBP Center, Inter-University Research Institute Corporation National Institutes of Natural Sciences Telephone: 0564-59-5930, 5931

6. National BioResource Project

The National BioResource Project (NBRP) strategically collects and preserves important bioresources that are the basic and foundation of life science research at the core bases of this project and provides them to universities and research institutes, thereby contributing to the development of life science research in Japan. In the future, in order to contribute to the development of life science research in Japan, it is necessary to continually collect useful bioresources.

For that matter, please deposit(*) available bioresources among bioresources developed by Grants-in-Aid for Scientific Research (limited to the bioresource targeted for NBRP). Please cooperate with the NBRP collecting activities.

It is recommended to utilize the resources already collected in NBRP from the viewpoint such as efficient implementation of research.

(*) Deposit: This is a procedure to approve the use (preservation/provision) in this project without transferring the various rights related to the resource. By specifying specific conditions in the deposit agreement, you can add usage conditions such as restrictions on usage and quotation of articles to users.

List of NBRP core bases upgrading program representative agencies

URL: https://nbrp.jp/resource/

< Inquiries >

National BioResource Project (NBRP) Executive Office

(established in the Research Organization for Information and Systems, National Institute of Genetics)

Telephone: 055-981-6809

7. Security Export Control Policy (Coping with Technology Leakage Overseas)

In Japan, export controls (*) are carried out under the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949) (hereinafter referred to as “Foreign Exchange Act”). Therefore, in principle, in order to export (provide) cargo and technology regulated by the Foreign Exchange Act, it is necessary to obtain permission of the Minister of Economy, Trade and Industry. It is reminded that KAKENHI grantees must observe the Foreign Exchange Act as well as other laws, guidelines and circular notices issued by the government.

(*) Japan's Security Export Control System established on the basis of international agreements mainly consists of (i) “List rules” which require permission of the Minister of Economy, Trade and

Industry in principle when exporting cargo or providing technology that carry specifications and/or functions higher than certain levels, such as carbon fiber and numerically controlled machine tool etc., and (ii) "Catch-all regulation" which requires permission of the Minister of Economy, Trade and Industry when exporting cargo or providing technology that are not subject to regulation under the List rules but do fall under certain regulatory requirements (application requirements, consumer requirements and/or informed requirements).

Not only export of cargo but also provision of technology will be subject to the regulation by the Foreign Exchange Act. When providing a "List rules" technology to non-residents or providing it in a foreign country, prior permission for provision is required. "Provision of technology" includes not only providing technical information such as design drawings, specifications, manuals, samples, and prototypes via storage media such as paper, mail, CD, USB memory, but also providing work knowledge and technical assistance at seminars through technical instruction, skill training, etc. Researchers should be aware that there may be case in which technologies subject to regulation by the Foreign Exchange Act are involved when mentoring foreign students and/or joint research activities with oversea groups.

For this reason, in implementing various research activities including research projects funded with KAKENHI, research institutions are asked to take systematic measures to ensure that the research achievements which have potential risks of being diverted to military use are not transferred to WMD developers, terrorist organizations, or people carrying out other dubious activities.

Details of the security trade control are published on the websites including the Ministry of Economy, Trade and Industry website.

○Ministry of Economy, Trade and Industry: Security Trade Control (General)
https://www.meti.go.jp/policy/anpo/

○Ministry of Economy, Trade and Industry: "Handbook on Security Trade Control"
https://www.meti.go.jp/policy/anpo/seminer/shiryo/handbook.pdf

○Center for Information on Security Trade Controls
https://www.cistec.or.jp/index.html

○"Guidance for the Control of Sensitive Technologies for Security Export for Academic and Research Institutions 3rd Edition"
https://www.meti.go.jp/policy/anpo/law_document/tutatu/t07sonota/t07sonota_jishukanri03.pdf

8. Strict Implementation of United Nations Security Council Resolution 2321

In the face of the nuclear test by Democratic People's Republic of Korea (DPRK) in September 2016 and repeated launches of ballistic missiles, the United Nations Security Council adopted the

United Nations Security Council Resolution 2321 on November 30, 2016 (ET, New York) deciding to impose additional and stronger sanctions on DPRK. In this regard, MEXT issued a letter of request entitled, "Strict Implementation of United Nations Security Council Resolution 2321 (Request)" (28 受文科際第 98 号) to relevant organizations as of February 17, 2017.

"Scientific and technical cooperation" as set forth in Paragraph 11 in the main text of the Resolution not only includes technologies regulated by the Foreign Exchange and Foreign Trade Act of Japan, but all cooperative activities except for medical exchanges. Therefore, it is critical that research institutions exercise strict implementation of the Resolution when conducting various research activities including said sponsored research.

The UNSC Resolution 2321 can be found at:

○ MOFA: United Nations Security Council Resolution 2321, Japanese translation (MOFA Notice No. 463 (issued on December 9, 2016)

https://www.mofa.go.jp/mofaj/files/000211409.pdf

9. Improvement of Treatment of Students in the Doctoral Course

"The 6th Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021)" addresses the need to enhance financial support for doctoral students in particular, in order to attract outstanding talents from home and abroad, and calls for research institutions to provide greater employment opportunities for doctoral students as research assistants (RAs) and to improve their treatment. To this end, the Basic Plan, for example, sets a numerical target to triple the number of doctoral students to receive subsidy roughly equivalent to their living cost (which is equivalent to about 30% of students enrolling in doctoral courses to receive such subsidy).

Furthermore, the "Guideline on Recruiting and Fostering Postdoctoral Fellows, Etc. (December 3, 2020, Committee on Human Resources, the Council for Science and Technology)" states that doctoral students "are students, but at the same time, also researchers in a certain way, and therefore it is the key responsibility of universities that foster researchers to provide the environment for research activities and to ensure proper treatment…It is of particular importance to treat them based on appropriate assessment of their contribution, by establishing compensations that meet the nature and content of their jobs and paying hourly wages according to the actual work hours under the proper labor management…When submitting applications to competitive research funds and other grants, universities and institutions must record the expenditures necessary to employ RAs as direct expense, and revise the school rules as necessary to make sure that the RAs are paid proper compensations."

Based on the above, when employing a doctoral student as RA, etc. for a KAKENHI project, set

the hourly wage according to the nature and content of his/her job based on the standard of each research institution and pay the wage according to the actual work hours under the proper labor management.

Furthermore, when employing a doctoral student as RA, etc., be mindful not to overload him/her with excessive work hours and make sure that he/she can maintain a good balance between the work and his/her own research and study hours.

10. Securing University Research Administrators (URAs) and other Management Personnel

The Sixth Science, Technology, and Innovation Basic Plan (Cabinet Decision on March 26, 2021) identifies the importance of efforts to improve the security of professional quality and treatment so that the positions of University Research Administrators (URAs) and other management personnel will become attractive. The Comprehensive Package to Strengthen Research Capacity and Support Young Researchers (January 23, 2020, Council for Science, Technology, and Innovation) also addresses the need to establish career paths for management personnel, URAs, engineers, etc. In light of these initiatives, research institutions are encouraged, to the extent possible, to secure certain lengths of fixed-term employment (of about five years or longer) for URAs and other management personnel (who are currently hired or will be hired newly by research institutions) when engaging them in the management of KAKENHI research programs, by using not only KAKENHI, but also funds such as indirect expenses and basic costs under other external funds, and donations, for example.
In addition, please make active efforts to provide support in securing career paths for these management personnel, for example, enrolling them in URA training, etc. Also consider utilizing the indirect expenses for such efforts.

11. Promoting Gender Equality in JSPS Programs

To advance science, it is important to secure an environment that allows diverse researchers to exercise their potentials and advance their activities. In March 2020, JSPS established the “Basic Guidelines for Promoting Gender Equality in JSPS Programs” to promote gender equal participation in areas of science.
As part of this initiative, JSPS opened a new website CHEERS! (https://cheers.jsps.go.jp/) in an aim to support the diverse careers of all researchers, such as balancing research and life events. JSPS will release useful information on, for example, how to balance research and childcare and actively carry out various initiatives through CHEERS! to create a network among researchers. Researchers are encouraged to visit the website.

Attached Table 2

Grants-in-Aid for Scientific Research-KAKENHI-

“Review Section Table”

March 9, 2022

Subdivision on Research Grant Screening Section of the Academic Deliberation
in the Subdivision on Science, Council for Science and Technology

About the Review Section Table

○The Review Section Table is classified by sections for the KAKENHI's review criteria. Applicants should select a review section that is most suitable for their own research proposal.

○There are three review sections: Basic, Medium-sized and Broad. The Review Section Table contains 1) Overview, 2) Table for Basic Section, 3) Table for Medium-sized and Broad Sections. Looking at the Overview, the applicants can understand an overall picture of sections. In addition, check the each Review Section Table for the detailed contents of each section and select a review section for their research proposal.

○The Basic Section is the fundamental unit. The Basic Section applies to "Grant-in-Aid for Scientific Research (B/C) (application section "General")" and for "Grant-in-Aid for Early-Career Scientists." Each Basic Section offers some examples related to the research contents. They are to help applicants understand the content of the Basic Section, so applicants are allowed to submit proposals even if the content is not given as examples.

○The Medium-sized Section applies to "Grant-in-Aid for Scientific Research (A) (application section "General")" and "Grant-in-Aid for Challenging Research (Pioneering/Exploratory)." Several Basic Sections are attached to indicate the scope of review for the Medium-sized Section. However, applicants are allowed to submit proposals even if the content does not fall under the Basic Sections included in the Medium-sized Section. It should be noted that some Basic Sections are included in several Medium-sized Sections, so applicants can select the Medium-sized Section that they consider most suitable for their own research proposal.

○The Broad Section applies to "Grant-in-Aid for Scientific Research (S)."
Several Medium-sized Sections are attached to indicate the scope of review of the Broad Section. However, applicants are allowed to submit proposals even if the content does not fall under the Medium-sized Sections included in the Broad Section. It should be noted that some Medium-sized Sections are included in several Broad Sections, so applicants can select the Broad Section that they consider most suitable for their own research proposal.

○To respond flexibly to research diversity in the review process, application in the Basic, Medium-sized and Broad Sections is made in the following formats: Basic Section: "○○ -related"; Medium-sized Section: "○○ and related fields," and Broad Section: listed alphabetically.

The Review Section Table (Overview)

Broad Section A

Medium-sized Section 1 : Philosophy, art, and related fields

Basic Section	
01010	Philosophy and ethics-related
01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related
01030	Religious studies-related
01040	History of thought-related
01050	Aesthetics and art studies-related
01060	History of arts-related
01070	Theory of art practice-related
01080	Sociology of science, history of science and technology-related
90010	Design-related

Medium-sized Section 2 : Literature, linguistics, and related fields

Basic Section	
02010	Japanese literature-related
02020	Chinese literature-related
02030	English literature and literature in the English language-related
02040	European literature-related
02050	Literature in general-related
02060	Linguistics-related
02070	Japanese linguistics-related
02080	English linguistics-related
02090	Japanese language education-related
02100	Foreign language education-related
90020	Library and information science, humanistic and social informatics-related

Medium-sized Section 3 : History, archaeology, museology, and related fields

Basic Section	
03010	Historical studies in general-related
03020	Japanese history-related
03030	History of Asia and Africa-related
03040	History of Europe and America-related
03050	Archaeology-related
03060	Cultural assets study-related
03070	Museology-related

Medium-sized Section 4 : Geography, cultural anthropology, folklore, and related fields

Basic Section	
04010	Geography-related
04020	Human geography-related
04030	Cultural anthropology and folklore-related
80010	Area studies-related
80020	Tourism studies-related
80030	Gender studies-related

Broad Section A (continued)

Medium-sized Section 5 : Law and related fields

Basic Section	
05010	Legal theory and history-related
05020	Public law-related
05030	International law-related
05040	Social law-related
05050	Criminal law-related
05060	Civil law-related
05070	New fields of law-related

Medium-sized Section 6 : Political science and related fields

Basic Section	
06010	Politics-related
06020	International relations-related
80010	Area studies-related
80030	Gender studies-related

Medium-sized Section 7 : Economics, business administration, and related fields

Basic Section	
07010	Economic theory-related
07020	Economic doctrines and economic thought-related
07030	Economic statistics-related
07040	Economic policy-related
07050	Public economics and labor economics-related
07060	Money and finance-related
07070	Economic history-related
07080	Business administration-related
07090	Commerce-related
07100	Accounting-related
80020	Tourism studies-related

Medium-sized Section 8 : Sociology and related fields

Basic Section	
08010	Sociology-related
08020	Social welfare-related
08030	Family and consumer sciences, and culture and living-related
80020	Tourism studies-related
80030	Gender studies-related

Broad Section A (continued)

Medium-sized Section 9 : Education and related fields

Basic Section	
09010	Education-related
09020	Sociology of education-related
09030	Childhood and nursery/pre-school education-related
09040	Education on school subjects and primary/ secondary education-related
09050	Tertiary education-related
09060	Special needs education-related
09070	Educational technology-related
09080	Science education-related
02090	Japanese language education-related
02100	Foreign language education-related

Medium-sized Section 10 : Psychology and related fields

Basic Section	
10010	Social psychology-related
10020	Educational psychology-related
10030	Clinical psychology-related
10040	Experimental psychology-related
90030	Cognitive science-related

Broad Section B

Medium-sized Section 11 : Algebra, geometry, and related fields

Basic Section	
11010	Algebra-related
11020	Geometry-related

Medium-sized Section 12 : Analysis, applied mathematics, and related fields

Basic Section	
12010	Basic analysis-related
12020	Mathematical analysis-related
12030	Basic mathematics-related
12040	Applied mathematics and statistics-related

Medium-sized Section 13 : Condensed matter physics and related fields

Basic Section	
13010	Mathematical physics and fundamental theory of condensed matter physics-related
13020	Semiconductors, optical properties of condensed matter and atomic physics-related
13030	Magnetism, superconductivity and strongly correlated systems-related
13040	Biophysics, chemical physics and soft matter physics-related

Medium-sized Section 14 : Plasma science and related fields

Basic Section	
14010	Fundamental plasma-related
14020	Nuclear fusion-related
14030	Applied plasma science-related
80040	Quantum beam science-related

Medium-sized Section 15 : Particle-, nuclear-, astro-physics, and related fields

Basic Section	
80040	Quantum beam science-related
15010	Theoretical studies related to particle-, nuclear-, cosmic ray and astro-physics
15020	Experimental studies related to particle-, nuclear-, cosmic ray and astro-physics

Medium-sized Section 16 : Astronomy and related fields

Basic Section	
16010	Astronomy-related

Medium-sized Section 17 : Earth and planetary science and related fields

Basic Section	
17010	Space and planetary sciences-related
17020	Atmospheric and hydrospheric sciences-related
17030	Human geosciences-related
17040	Solid earth sciences-related
17050	Biogeosciences-related

Broad Section C

Medium-sized Section 18 : Mechanics of materials, production engineering, design engineering, and related fields

Basic Section	
18010	Mechanics of materials and materials-related
18020	Manufacturing and production engineering-related
18030	Design engineering-related
18040	Machine elements and tribology-related

Medium-sized Section 19 : Fluid engineering, thermal engineering, and related fields

Basic Section	
19010	Fluid engineering-related
19020	Thermal engineering-related

Medium-sized Section 20 : Mechanical dynamics, robotics, and related fields

Basic Section	
20010	Mechanics and mechatronics-related
20020	Robotics and intelligent system-related

Medium-sized Section 21 : Electrical and electronic engineering and related fields

Basic Section	
21010	Power engineering-related
21020	Communication and network engineering-related
21030	Measurement engineering-related
21040	Control and system engineering-related
21050	Electric and electronic materials-related
21060	Electron device and electronic equipment-related

Medium-sized Section 22 : Civil engineering and related fields

Basic Section	
22010	Civil engineering material, execution and construction management-related
22020	Structure engineering and earthquake engineering-related
22030	Geotechnical engineering-related
22040	Hydroengineering-related
22050	Civil engineering plan and transportation engineering-related
22060	Environmental systems for civil engineering-related

Medium-sized Section 23 : Architecture, building engineering, and related fields

Basic Section	
23010	Building structures and materials-related
23020	Architectural environment and building equipment-related
23030	Architectural planning and city planning-related
23040	Architectural history and design-related
90010	Design-related

Medium-sized Section 24 : Aerospace engineering, marine and maritime engineering, and related fields

Basic Section	
24010	Aerospace engineering-related
24020	Marine engineering-related

Medium-sized Section 25 : Social systems engineering, safety engineering, disaster prevention engineering, and related fields

Basic Section	
25010	Social systems engineering-related
25020	Safety engineering-related
25030	Disaster prevention engineering-related

Broad Section D

Medium-sized Section 26 : Materials engineering and related fields

Basic Section	
26010	Metallic material properties-related
26020	Inorganic materials and properties-related
26030	Composite materials and interfaces-related
26040	Structural materials and functional materials-related
26050	Material processing and microstructure control-related
26060	Metals production and resources production-related

Medium-sized Section 27 : Chemical engineering and related fields

Basic Section	
27010	Transport phenomena and unit operations-related
27020	Chemical reaction and process system engineering-related
27030	Catalyst and resource chemical process-related
27040	Biofunction and bioprocess engineering-related

Medium-sized Section 28 : Nano/micro science and related fields

Basic Section	
28010	Nanometer-scale chemistry-related
28020	Nanostructural physics-related
28030	Nanomaterials-related
28040	Nanobioscience-related
28050	Nano/micro-systems-related

Medium-sized Section 29 : Applied condensed matter physics and related fields

Basic Section	
29010	Applied physical properties-related
29020	Thin film/surface and interfacial physical properties-related
29030	Applied condensed matter physics-related

Medium-sized Section 30 : Applied physics and engineering and related fields

Basic Section	
30010	Crystal engineering-related
30020	Optical engineering and photon science-related

Medium-sized Section 31 : Nuclear engineering, earth resources engineering, energy engineering, and related fields

Basic Section	
31010	Nuclear engineering-related
31020	Earth resource engineering, Energy sciences-related

Medium-sized Section 90 : Biomedical engineering and related fields

Basic Section	
90110	Biomedical engineering-related
90120	Biomaterials-related
90130	Medical systems-related
90140	Medical technology assessment-related
90150	Medical assistive technology-related

Broad Section E

Medium-sized Section 32: Physical chemistry, functional solid state chemistry, and related fields

Basic Section	
32010	Fundamental physical chemistry-related
32020	Functional solid state chemistry-related

Medium-sized Section 33: Organic chemistry and related fields

Basic Section	
33010	Structural organic chemistry and physical organic chemistry-related
33020	Synthetic organic chemistry-related

Medium-sized Section 34: Inorganic/coordination chemistry, analytical chemistry, and related fields

Basic Section	
34010	Inorganic/coordination chemistry-related
34020	Analytical chemistry-related
34030	Green sustainable chemistry and environmental chemistry-related

Medium-sized Section 35: Polymers, organic materials, and related fields

Basic Section	
35010	Polymer chemistry-related
35020	Polymer materials-related
35030	Organic functional materials-related

Medium-sized Section 36 : Inorganic materials chemistry, energy-related chemistry, and related fields

Basic Section	
36010	Inorganic compounds and inorganic materials chemistry-related
36020	Energy-related chemistry

Medium-sized Section 37: Biomolecular chemistry and related fields

Basic Section	
37010	Bio-related chemistry
37020	Chemistry and chemical methodology of biomolecules-related
37030	Chemical biology-related

Broad Section F

Medium-sized Section 38 : Agricultural chemistry and related fields

Basic Section	
38010	Plant nutrition and soil science-related
38020	Applied microbiology-related
38030	Applied biochemistry-related
38040	Bioorganic chemistry-related
38050	Food sciences-related
38060	Applied molecular and cellular biology-related

Medium-sized Section 39: Agricultural and environmental biology and related fields

Basic Section	
39010	Science in plant genetics and breeding-related
39020	Crop production science-related
39030	Horticultural science-related
39040	Plant protection science-related
39050	Insect science-related
39060	Conservation of biological resources-related
39070	Landscape science-related

Medium-sized Section 40: Forestry and forest products science, applied aquatic science, and related fields

Basic Section	
40010	Forest science-related
40020	Wood science-related
40030	Aquatic bioproduction science-related
40040	Aquatic life science-related

Medium-sized Section 41: Agricultural economics and rural sociology, agricultural engineering, and related fields

Basic Section	
41010	Agricultural and food economics-related
41020	Rural sociology and agricultural structure-related
41030	Rural environmental engineering and planning-related
41040	Agricultural environmental engineering and agricultural information engineering-related
41050	Environmental agriculture-related

Medium-sized Section 42: Veterinary medical science, animal science, and related fields

Basic Section	
42010	Animal production science-related
42020	Veterinary medical science-related
42030	Animal life science-related
42040	Laboratory animal science-related

Broad Section G

Medium-sized Section 43 : Biology at molecular to cellular levels, and related fields

Basic Section	
43010	Molecular biology-related
43020	Structural biochemistry-related
43030	Functional biochemistry-related
43040	Biophysics-related
43050	Genome biology-related
43060	System genome science-related

Medium-sized Section 44 : Biology at cellular to organismal levels, and related fields

Basic Section	
44010	Cell biology-related
44020	Developmental biology-related
44030	Plant molecular biology and physiology-related
44040	Morphology and anatomical structure-related
44050	Animal physiological chemistry, physiology and behavioral biology-related

Medium-sized Section 45 : Biology at organismal to population levels and anthropology, and related fields

Basic Section	
45010	Genetics-related
45020	Evolutionary biology-related
45030	Biodiversity and systematics-related
45040	Ecology and environment-related
45050	Physical anthropology-related
45060	Applied anthropology-related

Medium-sized Section 46 : Neuroscience and related fields

Basic Section	
46010	Neuroscience-general-related
46020	Anatomy and histopathology of nervous system-related
46030	Function of nervous system-related

Broad Section H

Medium-sized Section 47 : Pharmaceutical sciences and related fields

Basic Section	
47010	Pharmaceutical chemistry and drug development sciences-related
47020	Pharmaceutical analytical chemistry and physicochemistry-related
47030	Pharmaceutical hygiene and biochemistry-related
47040	Pharmacology-related
47050	Environmental and natural pharmaceutical resources-related
47060	Clinical pharmacy-related

Medium-sized Section 48 : Biomedical structure and function and related fields

Basic Section	
48010	Anatomy-related
48020	Physiology-related
48030	Pharmacology-related
48040	Medical biochemistry-related

Medium-sized Section 49 : Pathology, infection/immunology, and related fields

Basic Section	
49010	Pathological biochemistry-related
49020	Human pathology-related
49030	Experimental pathology-related
49040	Parasitology-related
49050	Bacteriology-related
49060	Virology-related
49070	Immunology-related

Broad Section I		
Medium-sized Section 50 : Oncology and related fields		
	Basic Section	
	50010	Tumor biology-related
	50020	Tumor diagnostics and therapeutics-related
Medium-sized Section 51 : Brain sciences and related fields		
	Basic Section	
	51010	Basic brain sciences-related
	51020	Cognitive and brain science-related
	51030	Pathophysiologic neuroscience-related
Medium-sized Section 52 : General internal medicine and related fields		
	Basic Section	
	52010	General internal medicine-related
	52020	Neurology-related
	52030	Psychiatry-related
	52040	Radiological sciences-related
	52050	Embryonic medicine and pediatrics-related
Medium-sized Section 53 : Organ-based internal medicine and related fields		
	Basic Section	
	53010	Gastroenterology-related
	53020	Cardiology-related
	53030	Respiratory medicine-related
	53040	Nephrology-related
	53050	Dermatology-related
Medium-sized Section 54 : Internal medicine of the bio-information integration and related fields		
	Basic Section	
	54010	Hematology and medical oncology-related
	54020	Connective tissue disease and allergy-related
	54030	Infectious disease medicine-related
	54040	Metabolism and endocrinology-related
Medium-sized Section 55 : Surgery of the organs maintaining homeostasis and related fields		
	Basic Section	
	55010	General surgery and pediatric surgery-related
	55020	Digestive surgery-related
	55030	Cardiovascular surgery-related
	55040	Respiratory surgery-related
	55050	Anesthesiology-related
	55060	Emergency medicine-related
Medium-sized Section 56 : Surgery related to the biological and sensory functions and related fields		
	Basic Section	
	56010	Neurosurgery-related
	56020	Orthopedics-related
	56030	Urology-related
	56040	Obstetrics and gynecology-related
	56050	Otorhinolaryngology-related
	56060	Ophthalmology-related
	56070	Plastic and reconstructive surgery-related

Broad Section I (continued)		
Medium-sized Section 57 : Oral science and related fields		
	Basic Section	
	57010	Oral biological science-related
	57020	Oral pathobiological science-related
	57030	Conservative dentistry-related
	57040	Regenerative dentistry and dental engineering-related
	57050	Prosthodontics-related
	57060	Surgical dentistry-related
	57070	Developmental dentistry-related
	57080	Social dentistry-related
Medium-sized Section 58 : Society medicine, nursing, and related fields		
	Basic Section	
	58010	Medical management and medical sociology-related
	58020	Hygiene and public health-related: including laboratory approach
	58030	Hygiene and public health-related: excluding laboratory approach
	58040	Forensics medicine-related
	58050	Fundamental of nursing-related
	58060	Clinical nursing-related
	58070	Lifelong developmental nursing-related
	58080	Gerontological nursing and community health nursing-related
Medium-sized Section 59 : Sports sciences, physical education, health sciences, and related fields		
	Basic Section	
	59010	Rehabilitation science-related
	59020	Sports sciences-related
	59030	Physical education, and physical and health education-related
	59040	Nutrition science and health science-related
Medium-sized Section 90 : Biomedical engineering and related fields		
	Basic Section	
	90110	Biomedical engineering-related
	90120	Biomaterials-related
	90130	Medical systems-related
	90140	Medical technology assessment-related
	90150	Medical assistive technology-related

Broad Section J

Medium-sized Section 60 : Information science, computer engineering, and related fields

Basic Section	
60010	Theory of informatics-related
60020	Mathematical informatics-related
60030	Statistical science-related
60040	Computer system-related
60050	Software-related
60060	Information network-related
60070	Information security-related
60080	Database-related
60090	High performance computing-related
60100	Computational science-related

Medium-sized Section 61 : Human informatics and related fields

Basic Section	
61010	Perceptual information processing-related
61020	Human interface and interaction-related
61030	Intelligent informatics-related
61040	Soft computing-related
61050	Intelligent robotics-related
61060	Kansei informatics-related
90010	Design-related
90030	Cognitive science-related

Medium-sized Section 62 : Applied informatics and related fields

Basic Section	
62010	Life, health and medical informatics-related
62020	Web informatics and service informatics-related
62030	Learning support system-related
62040	Entertainment and game informatics-related
90020	Library and information science, humanistic and social informatics-related

Broad Section K

Medium-sized Section 63 : Environmental analyses and evaluation and related fields

Basic Section	
63010	Environmental dynamic analysis-related
63020	Radiation influence-related
63030	Chemical substance influence on environment-related
63040	Environmental impact assessment-related

Medium-sized Section 64 : Environmental conservation measure and related fields

Basic Section	
64010	Environmental load and risk assessment-related
64020	Environmental load reduction and remediation-related
64030	Environmental materials and recycle technology-related
64040	Social-ecological systems-related
64050	Sound material-cycle social systems-related
64060	Environmental policy and social systems-related

The Review Section Table (Table for Basic Section)

When selecting a review section, applicants should first acquire an overall picture of the review sections based on the Review Section Table (Overview). In addition, check the Review Section Table (Table for Basic Section) for the detailed contents of each section and select a review section for their research proposal.

Also, some items of Basic Section may be presented in plural Medium-sized and Broad Sections. The items of Basic Section presented in plural Medium-sized Section are 9 and 3 items among 9 are presented in plural Medium-sized and Broad Sections (as shown below).

In addition, five other Basic Sections (90110-90150) may be presented in only one Medium-sized Section and two Broad Sections.

When selecting a Medium-sized or Broad Section, applicants should refer to the Attachment 2 “Review Section Table (Table for Medium-sized and Broad Sections), and select the one that seems to be most suitable for their own research proposal.

【Basic sections may be presented in plural Medium-sized and Broad Section】

Basic Section Item	Basic Section Description	Medium-sized Sections corresponding Basic Sections	Broad Sections corresponding Basic Sections
02090	Japanese language education-related	２，９	A
02100	Foreign language education-related	２，９	A
80010	Area studies-related	４，６	A
80020	Tourism studies-related	４，７，８	A
80030	Gender studies-related	４，６，８	A
80040	Quantum beam science-related	１４，１５	B
90010	Design-related	１，２３，６１	A，C，J
90020	Library and information science, humanistic and social informatics-related	２，６２	A，J
90030	Cognitive science-related	１０，６１	A，J
90110	Biomedical engineering-related	９０	D，I
90120	Biomaterials-related	９０	D，I
90130	Medical systems-related	９０	D，I
90140	Medical technology assessment-related	９０	D，I
90150	Medical assistive technology-related	９０	D，I

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
01010	Philosophy and ethics-related Philosophy in general, Ethics in general, Western philosophy, Western ethics, Japanese philosophy, Japanese ethics, Applied ethics, etc.	1	A
01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related Chinese philosophy/thought, Indian philosophy/thought, Buddhist philosophy, Bibliography, Philology, etc.	1	A
01030	Religious studies-related History of religions, Philosophy of religion, Theology, Sociology of religion, Psychology of religion, Anthropology of religion,Studies of religious folklore, Mythology, Bibliography, Philology, etc.	1	A
01040	History of thought-related History of thought in general, History of Western thought, History of Eastern thought, History of Japanese thought, History of Islamic thought, etc.	1	A
01050	Aesthetics and art studies-related Philosophy of art, Aesthetics, Music theory, Theatrical theory, Miscellaneous art studies, etc.	1	A
01060	History of arts-related Japanese art, Eastern art, Western art, Contemporary art, Craft, Design, Architecture, Costume, Photography, etc.	1	A
01070	Theory of art practice-related Art expression, Arts management, Art policy, Art production, etc.	1	A
01080	Sociology of science, history of science and technology-related Sociology of science, History of science, History of technology, History of medicine, Industrial archeology, Philosophy of science, Foundation of science, STS (Science, technology and society), etc.	1	A
02010	Japanese literature-related Japanese literature in general, Ancient literature, Medieval literature, Chinese classics in Japan, Bibliography, Philology, Premodern literature, Modern literature, Contemporary literature, Literary theory, etc.	2	A
02020	Chinese literature-related Chinese literature, Bibliography, Philology, Literary theory, etc.	2	A
02030	English literature and literature in the English language-related English literature, American literature, Literature in the English language, Literary theory, Bibliography, Philology, etc.	2	A
02040	European literature-related French literature, Literature in the French language, German literature, Literature in the German language, Classics, Russian and East European literature, Literature in other European languages, Literary theory, Bibliography, Philology, etc.	2	A
02050	Literature in general-related Literature in other languages and areas, Literary theory, Comparative literature, Bibliography, Philology, Literature education, etc.	2	A
02060	Linguistics-related Phonetics/phonology, Semantics/pragmatics, Morphosyntax, Sociolinguistics, Contrastive linguistics, Psycholinguistics, Neurolinguistics, Historical linguistics, Corpus linguistics, Endangered and minority languages, etc.	2	A
02070	Japanese linguistics-related Phonetics/phonology, Writing systems, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Language life, Dialect, History of the Japanese language, History of Japanese linguistics, etc.	2	A
02080	English linguistics-related Phonetics/phonology, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Sociolinguistics, Diversity of the English language, Corpus linguistics, History of the English language, History of English linguistics, etc.	2	A

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
02090	Japanese language education-related Research on learners, Language acquisition, Teaching material, Curriculum evaluation, Japanese language education for specific purposes, Bilingual education, Research on teachers, Japanese language for Japanese language education, History of Japanese language education, Cross-cultural understanding, etc.	2, 9	A
02100	Foreign language education-related Learning method, Computer-assisted language learning (CALL), Teaching material, Language testing, Theory of second language acquisition, Early English education, History of foreign language education and language policies, Curriculum evaluation, Training foreign language teachers, Cross-cultural understanding, etc.	2, 9	A
03010	Historical studies in general-related Historical theory, Historical methodology, Research in historical materials, Memory and medium, World history, History of cultural and diplomatic exchange, Comparative history, Global history, Environmental history, History of emotions, etc.	3	A
03020	Japanese history-related History of ancient Japan, History of medieval Japan, History of early modern Japan, History of modern Japan, History of local Japan, History of external relations, History of culture and religion, History of Japanese environment, History of Japanese city, Research in historical materials, etc.	3	A
03030	History of Asia and Africa-related Chinese history, East Asian history, Central Eurasian history, Southeast Asian history, Oceanian history, South Asian history, West Asian history, African history, History of cultural and diplomatic exchange, Research in historical materials, etc.	3	A
03040	History of Europe and America-related Ancient European history, Medieval European history, Modern and contemporary West European history, Modern and contemporary East European history, North and South American history, History of cultural and diplomatic exchange, Comparative history, Research in historical materials, etc.	3	A
03050	Archaeology-related Archaeology in general, Prehistoric archaeology, Historical archaeology, Japanese archaeology, Ancient civilizations, History of material culture, Experimental archaeology, Information archaeology, Study of buried cultural property, Ecological archeology, etc.	3	A
03060	Cultural assets study-related Dating methods, Material analysis, Production techniques, Conservation science, Archaeological prospection, Plant and animal residues, Human remains, Cultural heritage, Cultural property policy, Restoration of cultural properties, etc.	3	A
03070	Museology-related Museum displays and exhibitions, Museum management, Museum collections and documentation, Museum conservation and preservation, Museum education and learning, Museum informatics and media studies, Museum finance and administration, History of museums and museology, etc.	3	A
04010	Geography-related Geography in general, Land use, Landscape, Environmental system, Geomorphology, Climatology, Hydrology, Cartography, Geographic information system, Regional planning, etc.	4	A
04020	Human geography-related Human geography in general, Economic geography, Social geography, Political geography, Cultural geography, Urban geography, Rural geography, Historical geography, Regional geography, Geography education, etc.	4	A
04030	Cultural anthropology and folklore-related Cultural anthropology in general, Folklore in general, Material culture, Ecology, Social relationship, Religion, Arts, Health care, Border crossing, Minority, etc.	4	A

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
80010	Area studies-related Area studies in general, Cross-regional comparative studies, Aid, Social development, Interregional exchange, Environment, Transnationalism, Globalization, Refugees, Conflict, etc.	4, 6	A
80020	Tourism studies-related Tourism studies in general, Tourism resources, Tourism policy, Tourism industry, Tourist area, Tourists, Tourism culture, Tourism media, Sustainable tourism, Tourism ethics, etc.	4, 7, 8	A
80030	Gender studies-related Gender studies in general, Feminism, Men's studies, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.	4, 6, 8	A
05010	Legal theory and history-related Legal philosophy, Roman law, Legal history, Sociology of law, Comparative law, Foreign law, Law and policy, Law and economics, Judicial system, etc.	5	A
05020	Public law-related Constitutional law, Administrative law, Tax law, etc.	5	A
05030	International law-related Public international law, Private international law, International human rights law, International economic law, EU law, etc.	5	A
05040	Social law-related Labor law, Economic law, Social security law, Education law, etc.	5	A
05050	Criminal law-related Criminal law, Criminal procedure, Criminology, Criminal justice policy, Juvenile law, Law and psychology, etc.	5	A
05060	Civil law-related Civil law, Commercial law, Civil procedure, Insolvency law, Alternative dispute resolution, etc.	5	A
05070	New fields of law-related Environmental law, Medical law, Information law, Consumer law, Intellectual property law, Law and gender, Legal profession, etc.	5	A
06010	Politics-related Political theory, History of political thought, Political history, Political process, Political participation, Political economy, Public administration, Local government, Comparative politics, Public policy, etc.	6	A
06020	International relations-related Theory of international relations, International history, Foreign policy, International security, International political economy, Global governance, International cooperation, Peace research, etc.	6	A
07010	Economic theory-related Microeconomics, Macroeconomics, Game theory, Behavioral economics, Experimental economics, Economic theory, Evolutionary economics, Economic institutions, Economic systems, etc.	7	A
07020	Economic doctrines and economic thought-related Economic doctrines, Economic thought, Social thought, Economic philosophy, etc.	7	A
07030	Economic statistics-related Statistical system, Statistical research, Economic statistics, Big data, Econometrics, Financial econometrics, etc.	7	A
07040	Economic policy-related Economic policy, Industrial organization, International economics, Development economics, Environmental and resource economics, Japanese economy, Regional economy, Urban economics, Transportation economics, Spatial economics, etc.	7	A

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
07050	Public economics and labor economics-related Public finance, Public economics, Health economics, Labor economics, Social security, Education economics, Law and economics, Political economy, Demography, etc.	7	A
07060	Money and finance-related Monetary economics, Finance, International finance, Corporate finance, Financial engineering, Insurance, etc.	7	A
07070	Economic history-related Economic history, Business history, Industrial history, etc.	7	A
07080	Business administration-related Organization theory, Corporate strategy, Organizational behavior, Corporation theory, Corporate governance theory, Human resource management, Technology/Innovation management theory, International business, Management information, Business administration in general, etc.	7	A
07090	Commerce-related Marketing, Consumer behavior, Distributive sciences, Logistics, Commerce in general, etc.	7	A
07100	Accounting-related Financial accounting, Management accounting, Auditing, Accounting in general, etc.	7	A
08010	Sociology-related Sociology in general, Community, Family, Labor, Stratification, Culture, Media, Ethnicity, Social movements, Social research, etc.	8	A
08020	Social welfare-related Social work, Social policy, Social welfare history, Child welfare, Social welfare for people with disabilities, Social welfare for aging, Community welfare, Poverty, Volunteerism, Social welfare in general, etc.	8	A
08030	Family and consumer sciences, and culture and living-related Dress and fashion, Diet habits, Housing, Family resource management, Family relations, Lifestyle, Culture and living, Family and consumer education, Family and consumer sciences in general, etc.	8	A
09010	Education-related History of education, Philosophy of education, Curriculum and pedagogy, Teacher and trainer, School education, Social and community education, Institutions and administration, Comparative education, Educational administration, etc.	9	A
09020	Sociology of education-related Sociology of education, Socialization, Educational community, Destination and career formation, Class disparities, Gender, Education policy, Globalization and development, etc.	9	A
09030	Childhood and nursery/pre-school education-related Childhood, Nursery/pre-school education, Right of child, Development, Contents and methods of child care, Childcare facilities and kindergarten, Caregiver and pre-school teacher, Child care support, Childhood culture, History and thought, etc.	9	A
09040	Education on school subjects and primary/secondary education-related Education of individual subjects, Lessons of each subject area, Instructional guidance, Teacher education, Special activities, Integrated studies, Moral education, etc.	9	A
09050	Tertiary education-related Policy, Admission and articulation, Curriculum, Career guidance, Teacher and staff, Scientific research, Regional link and contribution, Globalization, Management and governance, Non-university higher education, etc.	9	A

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
09060	Special needs education-related Philosophy and history, Inclusion and cohesive society, Instructions and supports, Developmental disabilities, Emotional disturbance, Intellectual disabilities, Language disorders, Physical disabilities, Career education, etc.	9	A
09070	Educational technology-related Curriculum development, Teaching-learning support systems, Utilization of media, Utilization of ICT, Teacher's education, Information literacy, etc.	9	A
09080	Science education-related Science education, Science communication, Scientific literacy, Science and society, STEM education, etc.	9	A
10010	Social psychology-related Social psychology in general, Self, Group, Attitude and behavior, Affection/emotion, Interpersonal relation, Social issues, Culture, etc.	10	A
10020	Educational psychology-related Educational psychology in general, Development, Family, School, Clinical practice, Personality, Learning, Assessment and evaluation, etc.	10	A
10030	Clinical psychology-related Clinical psychology in general, Psychological disorder, Assessment, Psychological intervention, Training, Mental health, Crime and delinquency, Community, etc.	10	A
10040	Experimental psychology-related Experimental psychology in general, Sensation, Perception, Attention, Memory, Language, Emotion, Learning, etc.	10	A
11010	Algebra-related Group theory, Ring theory, Representation theory, Algebraic combinatorics, Number theory, Arithmetic geometry, Algebraic geometry, Algebraic analysis, etc.	11	B
11020	Geometry-related Differential geometry, Riemannian geometry, Symplectic geometry, Complex geometry, Topology, Differential topology, Low dimensional topology, etc.	11	B
12010	Basic analysis-related Functional analysis, Complex analysis, Probability theory, Harmonic analysis, Operator theory, Spectral analysis, Operator algebras, Algebraic analysis, Representation theory, etc.	12	B
12020	Mathematical analysis-related Functional equations, Real analysis, Dynamical system, Variational method, Nonlinear analysis, Applied analysis, etc.	12	B
12030	Basic mathematics-related Mathematical logic and foundations, Information theory, Discrete mathematics, Computer mathematics, History of mathematics, etc.	12	B
12040	Applied mathematics and statistics-related Numerical analysis, Mathematical modelling, Optimal control, Game theory, Statistical mathematics, etc.	12	B
13010	Mathematical physics and fundamental theory of condensed matter physics-related Statistical physics, Fundamental theory of condensed matter physics, Mathematical physics, Nonequilibrium nonlinear physics, Fluid dynamics, Computational physics, Quantum information theory, etc.	13	B
13020	Semiconductors, optical properties of condensed matter and atomic physics-related Semiconductors, Dielectrics, Atoms and molecules, Mesoscopic systems, Crystals, Surfaces and interfaces, Optical properties of condensed matter, Quantum electronics, Quantum information, etc.	13	B
13030	Magnetism, superconductivity and strongly correlated systems-related Magnetism, Strongly correlated electron systems, Superconductivity, Quantum fluids and solids, Molecular solids, etc.	13	B
13040	Biophysics, chemical physics and soft matter physics-related Physics of biological phenomena, Physics of biological matters, Liquids and glasses, Soft matters, Rheology, etc.	13	B

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
14010	Fundamental plasma-related Basic plasmas, Magnetized plasmas, Laser plasmas, Strongly coupled plasmas, Plasma diagnostics, Astrophysical and space plasmas, etc.	14	B
14020	Nuclear fusion-related Plasma confinement, Plasma control, Plasma heating, Plasma diagnostics, Edge plasma, Plasma wall interaction, Inertial fusion, Fusion material, Fusion system, etc.	14	B
14030	Applied plasma science-related Plasma processing, Plasma material science, General plasma applications, etc.	14	B
80040	Quantum beam science-related Accelerators, Beam physics, Radiation detectors, Beam control, Applied quantum beam science, etc.	14, 15	B
15010	Theoretical studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.	15	B
15020	Experimental studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.	15	B
16010	Astronomy-related Theoretical astronomy, Radio astronomy, Optical/infrared astronomy, X-ray/γ-ray astronomy, Astrometry, Solar physics, Exoplanet astronomy, etc.	16	B
17010	Space and planetary sciences-related Solar-terrestrial physics, Aeronomy, Planetary science, Exoplanetary science, Extraterrestrial material science, etc.	17	B
17020	Atmospheric and hydrospheric sciences-related Climate system, Atmospheric science, Ocean science, Limnology, Glaciology, Paleoclimatology, etc.	17	B
17030	Human geosciences-related Geoenvironmental science, Natural disaster science, Geospatial information science, Quaternary research, Earth resources science, etc.	17	B
17040	Solid earth sciences-related Solid earth geophysics, Geology, Earth's interior material science, Solid earth geochemistry, etc.	17	B
17050	Biogeosciences-related Origin and evolution of life, Extremophile biology, Biogeochemistry, Paleoenvironmental science, Paleontology, etc.	17	B
18010	Mechanics of materials and materials-related Structural mechanics, Fatigue, Fracture, Biomaterials, Material design, Material characteristics, Material evaluation, etc.	18	C
18020	Manufacturing and production engineering-related Machining, Non-traditional machining, Ultraprecision machining, Machine tools, Manufacturing systems, Precision metrology, Process planning, etc.	18	C
18030	Design engineering-related Mechanical design, Product design, Design theory, Design for reliability, Optimal design, Computer-aided design, etc.	18	C
18040	Machine elements and tribology-related Machine elements, Mechanisms, Tribology, Actuators, Micromachines, etc.	18	C
19010	Fluid engineering-related Fluid machinery, Flow measurement, Computational fluid dynamics, Turbulence, Multiphase flow, Compressible flow, Incompressible flow, etc.	19	C

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
19020	Thermal engineering-related Heat transfer, Convection, Combustion, Thermophysical properties, Refrigeration and air-conditioning, Heat engine, Energy conversion, etc.	19	C
20010	Mechanics and mechatronics-related Kinematics, Kinetics, Vibration, Acoustics, Automation, Biomechanics, Instrument and control applications, Mechatronics applications, etc.	20	C
20020	Robotics and intelligent system-related Robotics, Intelligent system, Human mechanical system, Human interface, Planning, Intelligent spatial system, Virtual reality, Augmented reality, etc.	20	C
21010	Power engineering-related Electrical energy-related, Energy conservation, Power system engineering, Electric machinery, Power electronics, Effective utilization of electric energy, Electromagnetic compatibility, Wireless power transfer, etc.	21	C
21020	Communication and network engineering-related Information theory, Nonlinear theory, Signal processing, Communication systems, Modulation/demodulation, Antennas, Networks, Multimedia, Cryptography/security, etc.	21	C
21030	Measurement engineering-related Measurement theory, Measuring instruments, Applied wave metrology, Measurement systems, Signal processing, Sensing, etc.	21	C
21040	Control and system engineering-related Control theory, System theory, Control systems, Knowledge-based control systems, System information processing, System control applications, Biosystems engineering, etc.	21	C
21050	Electric and electronic materials-related Semiconductor, Dielectric materials, Magnetic materials, Organic materials, Superconductor, Composite materials, Thin films, Functional materials, Thick films, Fabrication/characterization methods, etc.	21	C
21060	Electron device and electronic equipment-related Electron devices, Circuit design, Optical devices, Spintronic devices, Millimeter wave/terahertz wave, Applied wave devices, Storage devices, Displays, Process technology, Implementation technology, etc.	21	C
22010	Civil engineering material, execution and construction management-related Concrete, Steel, Composite material, Wood, Pavement material, Repair and reinforce material, Execution, Maintenance, Construction management, etc.	22	C
22020	Structure engineering and earthquake engineering-related Applied mechanics, Structure engineering, Steel structure, Concrete structure, Composite structure, Wind engineering, Earthquake engineering, Aseismatic structure, Earthquake prevention, etc.	22	C
22030	Geotechnical engineering-related Soil mechanics, Foundation engineering, Rock engineering, Engineering Geology, Ground behavior, Geotechnical structures, Geo-disaster prevention, Geo-environment, Tunnel engineering, etc.	22	C
22040	Hydroengineering-related Hydraulics, Environmental hydraulics, Hydrology, River engineering, Water resource engineering, Coastal engineering, Port and harbor engineering, Ocean engineering, etc.	22	C
22050	Civil engineering plan and transportation engineering-related Civil engineering plan, Regional urban planning, Spatial planning, Disaster prevention plan, Transportation plan, Transportation engineering, Railway engineering, Surveying and remote sensing, Landscape design, Civil engineering history, etc.	22	C
22060	Environmental systems for civil engineering-related Environment plan, Environmental system, Environment conservation, Water serve and drainage systems, Waste, Water environment, Atmospheric circulation, Noise and vibration, Environment ecology, Environmental monitoring, etc.	22	C
23010	Building structures and materials-related Load theory, Structural analysis, Structural design, Structures, Earthquake resistant design, Foundation, Geotechnics, Structural material, Maintenance, Building construction method, etc.	23	C

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
23020	Architectural environment and building equipment-related Sound environment, Vibration environment, Light environment, Heat environment, Air environment, Environmental psychology/physiology, Building equipment, Fire engineering, Urban environment, Environment design, etc.	23	C
23030	Architectural planning and city planning-related Planning theory, Design theory, Housing theory, Buildings, Urban/regional planning, Administration, Building economics, Production management, Disaster prevention planning, Landscape, etc.	23	C
23040	Architectural history and design-related Architectural history, Urban history, Architectural theory, Design, Landscape, Preservation, Renovation, etc.	23	C
24010	Aerospace engineering-related Thermo-fluid dynamics, Structural mechanics, Propulsion, Aerospace craft design, Production engineering, Aircraft system, Aerodynamics, Spacecraft system, Space utilization, etc.	24	C
24020	Marine engineering-related Navigation, Structural mechanics, Structural design, Production technology, Marine propulsion, Marine transport, Marine development, Underwater engineering, Polar engineering, Marine environmental technology, etc.	24	C
25010	Social systems engineering-related Social systems, Industrial engineering, Operations research, Industrial management, Reliability engineering, Policy science, Regulatory science, Quality control, etc.	25	C
25020	Safety engineering-related Safety engineering, Safety system, Risk engineering, Risk management, Work safety, Industrial safety, Product safety, Safety information, Human engineering, Liability engineering, etc.	25	C
25030	Disaster prevention engineering-related Disaster prediction, Hazard map, Building prevention against disaster, Lifeline prevention against disaster, Regional disaster prevention planning, Risk evaluation of disaster, Disaster prevention policy, Disaster resilience, etc.	25	C
26010	Metallic material properties-related Electric and magnetic properties, Metastable states, Diffusion, Phase transformation, Phase diagram, Lattice defect, Mechanical properties, Thermal and optical properties, Materials computational science, Microstructure analysis, etc.	26	D
26020	Inorganic materials and properties-related Functional ceramics, Glass, Engineering ceramics, Carbon-based materials, Crystal structure analysis, Microstructure, Electric properties, Mechanical properties, Physical and chemical properties, Grain boundary, etc.	26	D
26030	Composite materials and interfaces-related Functional composite materials, Structural composite materials, Biocompatible composite materials, Polymer composite, Surface treatment, Bonding and joining, Interface properties, Gradient function, etc.	26	D
26040	Structural materials and functional materials-related Infrastructural materials, Structural materials, Functional materials, Medical welfare materials, Reliability, Sensor materials, Energy materials, Battery materials, Environmental materials, etc.	26	D
26050	Material processing and microstructure control-related Processing and molding, Molding, Weld joining, Crystal microstructure control, Laser processing, Precision processing, Polishing, Powder metallurgy, Coating, Corrosion and protection, etc.	26	D
26060	Metals production and resources production-related Separation and purification, Melting and solidifying, Crystal growth, Casting, Scarce resources substitution, Low environment impact, Recycle, etc.	26	D
27010	Transport phenomena and unit operations-related Phase equilibrium, Transport properties, Fluid-phase unit operation, Adsorption, Membrane separation, Stir mixing, Powder and particle, Crystallization, Film formation, Supercritical, etc.	27	D

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
27020	Chemical reaction and process system engineering-related Reaction operation, Novel reaction process, Reaction mechanism, Reactor design, Materials synthesis process, Microreactor, Process control, Process system design, Process informatics, etc.	27	D
27030	Catalyst and resource chemical process-related Catalyst preparation, Catalytic function, Energy conversion process, Energy technology, Resources effective utilization technology, Catalytic material, Active site analysis, etc.	27	D
27040	Biofunction and bioprocess engineering-related Biocatalyst engineering, Biofunction engineering, Food engineering, Medicochemical engineering, Bioproduction process, Bioreactor, Bioseparation, Biosensor, Biorefinery, etc.	27	D
28010	Nanometer-scale chemistry-related Nanoparticle chemistry, Mesoscopic chemistry, Nanostructure control, Self-assembly, Nanocarbons, Molecular devices, Nanointerface function, Nanospace function, etc.	28	D
28020	Nanostructural physics-related Physics in nanoscale materials and structures, Nanoprobes, Quantum dots, Quantum devices, Electron devices, Spin devices, Nano optical device, Nanotribology, Nanocarbon physics, etc.	28	D
28030	Nanomaterials-related Creation of nanomaterials, Analysis of nanomaterials, Nanosurfaces and nanointerfaces, Functional nanomaterials, Nanoparticles, Carbon nanomaterials, Two-dimensional materials, Nanocrystalline materials, Nanocomposites, Nanofabrication process, etc.	28	D
28040	Nanobioscience-related Biomolecular devices, Molecular manipulation, Molecular imaging, Nanomeasurements, Nanosynthesis, Single molecule science, Nano-bio interfaces, Biomolecular array, Genome engineering, etc.	28	D
28050	Nano/micro-systems-related MEMS, NEMS, BioMEMS, Nano/micro-fabrication, Nano/micro-chemical systems, Nano/micro-biosystems, Nano/micro-mechanics, Nano/micro-sensors, etc.	28	D
29010	Applied physical properties-related Magnetic materials, Superconductors, Dielectrics, Fine particles, Liquid crystals, New functional materials, Molecular electronics, Bioelectronics, Spintronics, etc.	29	D
29020	Thin film/surface and interfacial physical properties-related Thin-film engineering, Surface and interfacial engineering, Surface science, Vacuum, Measurement, Analysis, Nanoscopic technology, Advanced equipment, Electronics application, etc.	29	D
29030	Applied condensed matter physics-related Elementary quantities, Standards, Units, Physical quantity measurements and detection, Energy conversion, etc.	29	D
30010	Crystal engineering-related Metal, Semiconductor, Ceramics, Amorphous, Crystal growth, Artificial structures, Device structure, Crystal characterization, Plasma process, etc.	30	D
30020	Optical engineering and photon science-related Optical materials, Optical elements, Optical properties, Optical information processing, Laser, Optical sensing, Optical recording, Opto-electronics, Nonlinear optics, Quantum optics, etc.	30	D
31010	Nuclear engineering-related Reactor physics, Nuclear safety, Thermal-hydraulics and structure, Fuel material, Nuclear chemistry, Nuclear life cycle, Radiation safety, Radiation engineering, Fusion reactor engineering, Nuclear social environment, etc.	31	D
31020	Earth resource engineering, Energy sciences-related Resource prospecting, Resource development, Resource cycle, Resource economy, Energy system, Environmental load, Renewable energy, Natural resources and energy policy, etc.	31	D

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
32010	Fundamental physical chemistry-related Gas, Liquid, Solid, Nanomaterials, Bio-related materials, Structure and properties, Chemical reactions, Spectroscopy, Theoretical calculation, Data science, etc.	32	E
32020	Functional solid state chemistry-related Molecular materials, Inorganic compounds, Hybrid compounds, Colloids, Surface/interface, Electrical properties, Optical properties, Magnetic properties, Energy conversion, Catalysis, etc.	32	E
33010	Structural organic chemistry and physical organic chemistry-related Chemistry of organic crystals, Molecular recognition, Supermolecules, Functional organic molecules, Extended π-electron molecules, Organoelement chemistry, Reaction mechanism, Molecular chirality, Theoretical organic chemistry, etc.	33	E
33020	Synthetic organic chemistry-related Development of reactions, Reaction mechanism, Selective reactions, Asymmetric synthesis, Development of catalysts, Biocatalysis, Sustainable organic synthesis, Natural product synthesis, Process chemistry, etc.	33	E
34010	Inorganic/coordination chemistry-related Coordination chemistry, Organometallic chemistry, Inorganic solid-state chemistry, Bioinorganic chemistry, Solution chemistry, Clusters, Supramolecular complexes, Coordination polymers, Typical elements, Physical properties and functions, etc.	34	E
34020	Analytical chemistry-related Spectrometric analysis, Advanced measurements, Surface/interface analysis, Separation analysis, Analytical reagents, Radiochemical analysis, Electrochemical analysis, Bioanalysis, New analysis methods, etc.	34	E
34030	Green sustainable chemistry and environmental chemistry-related Green process, Green catalysts, Recycle, Environmental assessment, Environmentally conscious materials, Reduction of environmental load, Environmental restoration, Resource saving, Geochemistry, Environmental radioactivity, etc.	34	E
35010	Polymer chemistry-related Polymer synthesis, Polymer reactions, Functional polymers, Self-assembled polymers, Non-covalent polymers, Chiral polymers, Bio-related polymers, Polymer properties, Polymer structures, Polymer interface, etc.	35	E
35020	Polymer materials-related Properties of polymer materials, Synthesis of polymer materials, Functional polymer materials, Environmentally friendly polymer materials, Liquid crystal polymers, Gel, Biopolymers, Polymer composites, Polymer processing, etc.	35	E
35030	Organic functional materials-related Organic semiconductors, Liquid crystals, Optical materials, Device-related materials, Electrically conductive materials, Hybrid materials, Molecular functional materials, Organic hybrid materials, Materials for energy conversion, etc.	35	E
36010	Inorganic compounds and inorganic materials chemistry-related Crystals, Amorphous, Ceramics, Semiconductors, Inorganic device-related materials, Low-dimensional compounds, Porous materials, Nanoparticles, Multicomponent compounds, Hybrid materials, etc.	36	E
36020	Energy-related chemistry Energy resources, Energy conversion materials, Energy carriers, Solar energy utilization, Material separation, Catalytic transformation, Battery and electrochemical materials, Energy-saving materials, Renewable energy, Unused energy, etc.	36	E
37010	Bio-related chemistry Bioorganic chemistry, Bioinorganic chemistry, Biological reaction engineering, Biofunctional chemistry, Biofunctional materials, Biotechnology, etc.	37	E

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
37020	Chemistry and chemical methodology of biomolecules-related Natural product chemistry, Biologically active compounds, Molecular mechanism of biological activities, Biofunctional molecules, Combinatorial chemistry, Metabolomic analysis, etc.	37	E
37030	Chemical biology-related In vivo functional expression, Intracellular chemical reactions, Drug discovery science, Chemical library, Structure-activity relationship, Chemical probes, Biomolecular measurements, Molecular imaging, Proteomics, etc.	37	E
38010	Plant nutrition and soil science-related Plant metabolism and physiology, Nutritional elements in plants, Soil classification, Soil physical chemistry, Soil organisms, etc.	38	F
38020	Applied microbiology-related Microbial genetics/breeding, Microbial function, Microbial metabolism and physiology, Microbial applications, Control of microbes, Microbial ecology, Production of useful materials, etc.	38	F
38030	Applied biochemistry-related Cellular biochemistry, Applied biochemistry, Structural biology, Regulation of bioactivity, Metabolism and physiology, Cellular function, Molecular function, Production of useful materials, etc.	38	F
38040	Bioorganic chemistry-related Bioactive substances, Signal molecules, Natural products chemistry, Biosynthesis, Structure-activity relationship, Synthetic organic chemistry, Chemical biology, etc.	38	F
38050	Food sciences-related Food function, Food chemistry, Nutritional chemistry, Food analysis, Food engineering, Food safety, Functional food, Nutritional epidemiology, Clinical nutrition, etc.	38	F
38060	Applied molecular and cellular biology-related Molecular cell biology, Cellular bioengineering, Molecular engineering, Gene expression control, Cell-cell/intermolecular interactions, Cellular function, Production of useful materials, etc.	38	F
39010	Science in plant genetics and breeding-related Genetic resources, Breeding theories, Genomic breeding, Plants with novel traits, Quality components, Stress tolerance, Yielding ability, Reproduction and multiplication, Growth physiology, Development, etc.	39	F
39020	Crop production science-related Field crops, Crop yield, Crop product quality, Crop morphology, Growth prediction, Crop physiology, Field management, Low-cost cultivation techniques, Environmentally friendly agriculture, Field ecosystem, etc.	39	F
39030	Horticultural science-related Plant growth, flowering, and fruit development, Nursery plant propagation and production, Crop production systems, Cultivation techniques, Protected horticulture, Controlled environment systems, Breeding and development of new cultivars, Quality of horticultural products, Postharvest physiology and management, Socio-horticulture, etc.	39	F
39040	Plant protection science-related Plant pathology, Clinical plant science, Agricultural insect pest, Natural enemy, Weed, Agricultural chemicals, Integrated pest management, etc.	39	F
39050	Insect science-related Sericulture insect technology, Insect genetics, Insect pathology, Insect physiology and biochemistry, Insect ecology, Chemical ecology, Systematics, Symbiosis and parasitism, Social insects, Medical entomology, etc.	39	F
39060	Conservation of biological resources-related Conservation biology, Biodiversity conservation, Conservation of phylogenetic diversity, Genetic resources conservation, Ecosystem conservation, Conservation of microorganisms, Impacts of non-native species, etc.	39	F
39070	Landscape science-related Landscape architecture, Parks and open space planning, Landscape planning, Cultural landscape, Nature conservation, Landscape ecology, Parks and open space management, Parks, Environmental greening, Participatory community design, etc.	39	F

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
40010	Forest science-related Forest ecology, Forest biodiversity, Forest genetics and breeding, Silviculture, Forest protection, Forest environments, Erosion control, Forest utilization, Forest planning, Forest policy, etc.	40	F
40020	Wood science-related Wood structure, Wood property, Lignocellulose, Trace element, Fungus, Wood processing, Biomass-refinery, Wood based material, Wooden building, Forest products education, etc.	40	F
40030	Aquatic bioproduction science-related Aquatic environment, Fisheries, Aquatic resource management, Aquatic organisms, Aquatic ecosystem, Aquaculture, Fisheries engineering, Fishing community/fisheries policy, Fisheries economics/management/marketing, Fisheries education, etc.	40	F
40040	Aquatic life science-related Aquatic nutrition, Aquatic pathology, Aquatic genetics/heredity/breeding, Aquatic physiology, Utilization of aquatic organisms and biomass, Aquatic biological chemistry, Aquatic biotechnology, Aquatic food sciences, etc.	40	F
41010	Agricultural and food economics-related Food economy, Agricultural production economy, Agricultural policy, Food system, Food marketing, International agricultural development, Trade of agricultural commodities and livestock products, Rural resources and environment, etc.	41	F
41020	Rural sociology and agricultural structure-related Farm organization, Farm management, Agricultural structure, Agricultural market, Agricultural history, Rural society, Rural life, Agricultural cooperative, etc.	41	F
41030	Rural environmental engineering and planning-related Irrigation and drainage, Reclamation and conservation of agricultural land, Rural planning, Rural environment, Circulation of resources and energy, Disaster prevention in rural area, Stock management of agricultural infrastructures, Hydrodynamics and hydrology, Soil physics, Design and construction materials, etc.	41	F
41040	Agricultural environmental engineering and agricultural information engineering-related Agricultural production facilities, Bioproduction machinery, Environmental control, Agricultural meteorology and micrometeorology, Agricultural information, Greenhouse horticulture, Plant factory, Postharvest and supply chain, Nondestructive measurement, Remote sensing and geographic information system, etc.	41	F
41050	Environmental agriculture-related Biomass, Environmental manipulation, Biodiversity, Environmental analysis, Ecosystem services, Resources circulation system, Low-carbon societies, Life-cycle assessment, Environmental friendly agriculture, Watershed management, etc.	41	F
42010	Animal production science-related Breeding/genetics, Reproduction, Nutrition/feeding, Anatomy/physiology, Product, Environment, Behavior, Therapy, Grassland, Grazing, etc.	42	F
42020	Veterinary medical science-related Basic veterinary science, Pathological veterinary science, Applied veterinary science, Clinical veterinary science, Animal nursing, Animal welfare, Wildlife, etc.	42	F
42030	Animal life science-related Homeostasis, Cellular function, Biological defense, Integrated genetics, Development/differentiation, Biotechnology, etc.	42	F
42040	Laboratory animal science-related Genetic engineering, Developmental engineering, Animal models of disease, Facility management, Laboratory animal welfare, Laboratory animal-related technology, Bioresource, etc.	42	F
43010	Molecular biology-related Chromosome function, Chromatin, Epigenetics, Genome maintenance, Genome transmission, Chromosome re-organization, Gene expression, Non-coding RNA, Regulation of protein function, Molecular genetics, Regulation of RNA function, etc.	43	G

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
43020	Structural biochemistry-related Proteins, Nucleic acids, Lipids, Carbohydrates, Biological membrane, Molecular recognition, Denaturation, Three-dimensional structural analysis, Three-dimensional structural prediction, Molecular dynamics, etc.	43	G
43030	Functional biochemistry-related Enzymes, Sugar chain, Bioenergy conversion, Biological trace elements, Physiologically active substances, Cell signaling, Membrane transport, Proteolysis, Molecular recognition, Organelle, etc.	43	G
43040	Biophysics-related Structure biology, Physical property of biomolecules, Biomembrane, Photobiology, Molecular motor, Biometrics, Bioimaging, Systems biology, Synthetic biology, Theoretical biology, etc.	43	G
43050	Genome biology-related Genome organization, Genome function, Genome diversity, Molecular evolution of genome, Genome repair/maintenance, Trans-omics, Epigenome, Gene resource, Genome dynamics, etc.	43	G
43060	System genome science-related Network analyses, Synthetic biology, Biological databases, Bioinformatics, Genome analysis technology, Genome biotechnology, etc.	43	G
44010	Cell biology-related Cytoskeleton, Proteolysis, Organelle, Nuclear structure and function, Extracellular matrix, Signal transduction, Cell cycle, Cell motility, Cell-cell interaction, Cellular genetics, etc.	44	G
44020	Developmental biology-related Cell differentiation, Stem cells, Regeneration, Germ layer formation, Morphogenesis, Organogenesis, Fertilization, Germ cells, Developmental genetics, Evolution and development, etc.	44	G
44030	Plant molecular biology and physiology-related Photosynthesis, Growth physiology, Plant development, Organelle, Cell wall, Responses to environment, Plant-microbe interaction, Metabolism, Plant molecular function, etc.	44	G
44040	Morphology and anatomical structure-related Morphology, Comparative morphology, Morphological modeling, Ultrastructure, Morphological image analysis, Tissue organization, Microscopic technology, Imaging, etc.	44	G
44050	Animal physiological chemistry, physiology and behavioral biology-related Metabolic physiology, Neurophysiology, Neuroethology, Behavioral physiology, Animal physiological chemistry, Chronobiology, Comparative physiology, Comparative endocrinology, Behavioral genetics, etc.	44	G
45010	Genetics-related Molecular genetics, Cellular genetics, Developmental genetics, Behavioral genetics, Population genetics, Quantitative trait, Population genomics, Genome-wide association study, Genetic diversity, Epigenome diversity, etc.	45	G
45020	Evolutionary biology-related Molecular evolution, Evolutionary genetics, Phenotypic evolution, Evolutionary developmental biology, Evolution of ecological traits, Evolution of behaviors, Experimental evolution, Coevolution, Speciation, Evolutionary theory, etc.	45	G
45030	Biodiversity and systematics-related Taxonomic characters, Taxon, Classification system, Molecular phylogeny, Phyletic evolution, Speciation, Natural history, Biogeography, Rare species conservation, Biodiversity, etc.	45	G
45040	Ecology and environment-related Chemical ecology, Molecular ecology, Physiological ecology, Evolutionary ecology, Behavioral ecology, Population ecology, Community ecology, Conservation ecology, Biological interactions, Material cycles in ecosystems, etc.	45	G
45050	Physical anthropology-related Morphology and function, Bioarchaeology, Biological mechanism, Genome, Evolutionary genetics, Behavior, Ecology, Comparative cognition, Primates, Growth and aging, etc.	45	G

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
45060	Applied anthropology-related Physiological anthropology, Ergonomics, Forensic anthropology, Medical anthropology, Physiological polymorphisms, Environmental adaptability, Somatic and physiological function, Anthropometry and bioengineering, Lifestyle, etc.	45	G
46010	Neuroscience-general-related Neurochemistry, Neuron, Glia, Genome, Epigenetics, Neurobiology, Information processing, Synapse, Neurogenesis, etc.	46	G
46020	Anatomy and histopathology of nervous system-related Neural development, Anatomy of nervous system, Neural network structure, Neuropathology, etc.	46	G
46030	Function of nervous system-related Neurophysiology, Neuropharmacology, Neurotransmission, Neuroinformatics, Behavioral neuroscience, Neural system physiology, Cerebral blood flow, Autonomic nervous system, etc.	46	G
47010	Pharmaceutical chemistry and drug development sciences-related Inorganic chemistry, Organic chemistry, Medicinal chemistry, Medicinal molecular design, Drug discovery, Bio-related materials, Chemical biology, etc.	47	H
47020	Pharmaceutical analytical chemistry and physicochemistry-related Environmental analysis, Bioanalysis, Physicochemistry, Biophysics, Structural biology, Radiochemistry, Bioimaging, Drug formulation design, Computer science, Information science, etc.	47	H
47030	Pharmaceutical hygiene and biochemistry-related Environmental hygiene, Healthful nutrition, Disease prevention, Toxicology, Drug metabolism, Host defense, Molecular biology, Cell biology, Biochemistry, etc.	47	H
47040	Pharmacology-related Pharmacology, Pharmacogenomics, Applied pharmacology, Signal transduction, Drug interactions, Drug response, Pharmacotherapy, Pharmacotoxicology, etc.	47	H
47050	Environmental and natural pharmaceutical resources-related Environmental resource science, Natural products chemistry, Bioactive natural compounds, Medicinal resources, Medicinal foods, Pharmaceutical microbiology, etc.	47	H
47060	Clinical pharmacy-related Pharmacokinetics, Medical informatics, Social pharmacy, Clinical pharmacy, Pharmaceutics, Regulatory science, Education for the pharmacist, etc.	47	H
48010	Anatomy-related Macroscopic anatomy, Histology, Embryology, etc.	48	H
48020	Physiology-related General physiology, Pathophysiology, Comparative physiology, Environmental physiology, etc.	48	H
48030	Pharmacology-related Genomic pharmacology, Molecular and cellular pharmacology, Pathological pharmacology, Behavioral pharmacology, Pharmacology for drug discovery, Clinical pharmacology, etc.	48	H
48040	Medical biochemistry-related Biofunctional molecular and medical biochemistry, Genome medical sciences, Human genetics, Disease model, etc.	48	H
49010	Pathological biochemistry-related Molecular pathology, Metabolic disorders, Molecular diagnosis, etc.	49	H
49020	Human pathology-related Molecular pathology, Cyto- and histo-pathology, Diagnostic pathology, etc.	49	H
49030	Experimental pathology-related Disease models, Pathological regulation, Tissue regeneration, etc.	49	H

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
49040	Parasitology-related Parasite, Vector organism, Parasite pathogenicity, Epidemiology of parasites, Control of parasite infections, etc.	49	H
49050	Bacteriology-related Bacterium, Fungus, Antimicrobial resistance, Bacterial pathogenicity, Epidemiology of bacteria, Control of bacterial infections, etc.	49	H
49060	Virology-related Virus, Prion, Viral pathogenicity, Epidemiology of viruses, Control of viral infections, etc.	49	H
49070	Immunology-related Immune system, Immune response, Inflammation, Immune-related disorder, Immune regulation, etc.	49	H
50010	Tumor biology-related Cancer and gene, Tumor development, Invasion, Metastasis, Cancer microenvironment, Cancer and signal transduction, Characteristics of cancer cells, Cancer and immune cells, etc.	50	I
50020	Tumor diagnostics and therapeutics-related Genome analysis, Diagnostic markers, Molecule imaging, Chemotherapy, Nucleic acid therapy, Gene therapy, Immunotherapy, Molecular targeted therapy, Physical therapy, Radiation therapy, etc.	50	I
51010	Basic brain sciences-related Brain-machine interface, Model animal, Computational brain science, Brain information decoding, Control technologies, Brain imaging, Brain biometrics, etc.	51	I
51020	Cognitive and brain science-related Social behavior, Communication, Emotion, Decision making, Consciousness, Learning, Neuroeconomics, Neuropsychology, etc.	51	I
51030	Pathophysiologic neuroscience-related Clinical neuroscience, Dolorology, Sensory impairment, Movement disorder, Neurological disorder, Neurogenesis, Neuroimmunology, Cellular degeneration, Disease model, etc.	51	I
52010	General internal medicine-related Psychosomatic medicine, Laboratory medicine, General practice, Geriatrics, Psychosomatic internal medicine, Oriental medicine, Palliative medicine, etc.	52	I
52020	Neurology-related Neurology, Neurofunctional imaging, etc.	52	I
52030	Psychiatry-related Clinical psychiatry, Biological psychiatry, Forensic mental health, etc.	52	I
52040	Radiological sciences-related Diagnostic radiology, Therapeutic radiology, Radiation biology, Radiological technology, etc.	52	I
52050	Embryonic medicine and pediatrics-related Fetal medicine, Neonatal medicine, Pediatrics, etc.	52	I
53010	Gastroenterology-related Upper digestive tract, Lower digestive tract, Liver, Biliary tract, Pancreas, etc.	53	I
53020	Cardiology-related Ischemic heart disease, Valvular heart disease, Arrhythmia, Cardiomyopathy, Heart failure, Peripheral arterial disease, Arteriosclerosis, Hypertension, etc.	53	I
53030	Respiratory medicine-related Respiratory medicine, Asthma, Diffusive lung disease, COPD, Lung cancer, Pulmonary hypertension, etc.	53	I
53040	Nephrology-related Acute renal failure, Chronic kidney disease, Diabetic nephropathy, Hypertension, Aqueous electrolyte metabolism, Artificial dialysis, etc.	53	I

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
53050	Dermatology-related Dermatology, Cutaneous immune disease, Cutaneous infection, Cutaneous tumor, etc.	53	I
54010	Hematology and medical oncology-related Hematological oncology, Medical oncology, Hematological immunology, Anemia, Thrombosis and hemostasis, Chemotherapy, etc.	54	I
54020	Connective tissue disease and allergy-related Connective tissue disease, Allergy, Clinical immunology, Inflammation, etc.	54	I
54030	Infectious disease medicine-related Infection diagnostics, Infection therapeutics, Host defense, International infection science, etc.	54	I
54040	Metabolism and endocrinology-related Energy balance, Glucose metabolism, Lipid metabolism, Purine metabolism, Bone metabolism, Electrolyte balance, Endocrinology, Neuroendocrinology, Reproductive endocrinology, etc.	54	I
55010	General surgery and pediatric surgery-related Surgical basic principles, Breast surgery, Endocrine surgery, Pediatric surgery, Transplant surgery, Artificial organs science, Regeneration, Operation support, etc.	55	I
55020	Digestive surgery-related Upper gastrointestinal surgery, Lower gastrointestinal surgery, Hepatic surgery, Biliary surgery, Pancreatic surgery, etc.	55	I
55030	Cardiovascular surgery-related Coronary artery surgery, Heart valve surgery, Surgery for myocardial disease, Aortic surgery, Vascular surgery, Congenital heart surgery, etc.	55	I
55040	Respiratory surgery-related Lung surgery, Mediastinal surgery, Chest wall surgery, Respiratory tract surgery, etc.	55	I
55050	Anesthesiology-related Anesthesiology, Perioperative management, Pain management, Resuscitology, Palliative medicine, etc.	55	I
55060	Emergency medicine-related Intensive care medicine, Emergency resuscitation science, Trauma surgery, Disaster medicine, Disaster medical care, etc.	55	I
56010	Neurosurgery-related Neurosurgery, Spine and spinal cord diseases, etc.	56	I
56020	Orthopedics-related Orthopedics, Rehabilitation medicine, Sports medicine, etc.	56	I
56030	Urology-related Urology, Male genitalia science, etc.	56	I
56040	Obstetrics and gynecology-related Obstetrics, Reproductive endocrinology, Gynecologic oncology, Female health care medicine, etc.	56	I
56050	Otorhinolaryngology-related Otorhinolaryngology, Head and neck surgery, etc.	56	I
56060	Ophthalmology-related Ophthalmology, Ophthalmological optics, etc.	56	I
56070	Plastic and reconstructive surgery-related Plastic surgery, Reconstructive surgery, Aesthetic plastic surgery, etc.	56	I

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
57010	Oral biological science-related Oral anatomy, Oral histology and embryology, Oral physiology, Oral biochemistry, Pharmacology for hard tissues, etc.	57	I
57020	Oral pathobiological science-related Oral infectious diseases, Oral pathology, Oral experimental oncology, Immunity and inflammation, Laboratory medicine, etc.	57	I
57030	Conservative dentistry-related Operative dentistry, Endodontology, Periodontology, etc.	57	I
57040	Regenerative dentistry and dental engineering-related Regenerative dentistry, Biomaterial science, Dental materials science, Oral and maxillofacial prosthetics, Oral implantology, etc.	57	I
57050	Prosthodontics-related Prosthodontics, Oral rehabilitation, Gerodontology, etc.	57	I
57060	Surgical dentistry-related Oral and maxillofacial surgery, Oral maxillofacial reconstructive surgery, Dental anesthesiology, Psychosomatic medicine dentistry, Dental radiology, etc.	57	I
57070	Developmental dentistry-related Orthodontics, Pediatric dentistry, etc.	57	I
57080	Social dentistry-related Dental hygiene, Preventive dentistry, Oral health administration and management, Dental education, Forensic odontology, etc.	57	I
58010	Medical management and medical sociology-related Medical management, Medical social science, Ethics for medical science, Ethics for medical care, Biomedical education, History of medical science, Health policy and economics, Clinical trials, Health and medical services administration, Disaster medical science, etc.	58	I
58020	Hygiene and public health-related: including laboratory approach Hygiene, Public health, Epidemiology, Global health, etc.	58	I
58030	Hygiene and public health-related: excluding laboratory approach Hygiene, Public health, Epidemiology, Global health, etc.	58	I
58040	Forensics medicine-related Forensic medicine, Forensic pathology, Forensic toxicology, Forensic genetics, Suicide, Abuse, Clinical forensic medicine, Sudden death, etc.	58	I
58050	Fundamental of nursing-related Fundamental of nursing, Nursing education, Nursing administration, Nursing ethics, Global nursing, etc.	58	I
58060	Clinical nursing-related Critical care and emergency nursing, Perioperative nursing, Nursing of chronic illness, Oncology nursing, Psychiatric nursing, Palliative care nursing, etc.	58	I
58070	Lifelong developmental nursing-related Women's health nursing, Maternal nursing, Midwifery, Family health nursing, Child health nursing, School nursing, etc.	58	I
58080	Gerontological nursing and community health nursing-related Gerontological nursing, Community health nursing, Public health nursing, Disaster nursing, Home care nursing, etc.	58	I
59010	Rehabilitation science-related Rehabilitation medicine, Rehabilitation nursing, Rehabilitation medical care, Physicotherapeutics, Occupational therapy, Assistive technology, Speech and language therapy, etc.	59	I

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
59020	Sports sciences-related Sports physiology, Sports biochemistry, Sports medicine, Sports sociology, Sports management, Sports psychology, Sports education, Training science, Sports biomechanics, Adapted sports science, etc.	59	I
59030	Physical education, and physical and health education-related Growth developmental science, Physical and health education, Physical education in school, Educational physiology, Physical systems science, Higher brain function science, Martial arts theory, Outdoor education, etc.	59	I
59040	Nutrition science and health science-related Nutritional physiology, Nutritional biochemistry, Nutritional education, Clinical nutrition, Functional food, Lifestyle-related disease, Health promotion, Aging, etc.	59	I
60010	Theory of informatics-related Discrete structure, Mathematical logic, Theory of computation, Mathematical theory of programs, Computational complexity theory, Algorithm theory, Information theory, Coding theory, Theory of cryptography, Learning theory, etc.	60	J
60020	Mathematical informatics-related Optimization theory, Mathematical systems theory, System control theory, System analysis, System methodology, System modeling, System simulation, Combinatorial optimization, Queueing theory, Mathematical finance, etc.	60	J
60030	Statistical science-related Statistics, Data science, Modeling, Statistical inference, Multivariate analysis, Time series analysis, Statistical quality control, Applied statistics, etc.	60	J
60040	Computer system-related Computer architecture, Circuit and system, LSI design, LSI testing, Reconfigurable system, Dependable architecture, Low power technology, Hardware/software codesign, Embedded system, etc.	60	J
60050	Software-related Programming language, Programming methodology, Operating system, Parallel and distributed computing, Software engineering, Virtualization technology, Cloud computing, Software dependability, Software security, etc.	60	J
60060	Information network-related Network architecture, Network protocol, Internet, Mobile network, Pervasive computing, Sensor network, IoT, Traffic engineering, Network management, Service platform technology, etc.	60	J
60070	Information security-related Cryptography, Tamper resistance technology, Authentication, Biometrics, Access control, Malware countermeasure, Countermeasures against cyber attacks, Privacy protection, Digital forensics, Security evaluation and authorization, etc.	60	J
60080	Database-related Data model, Database system, Multimedia database, Information retrieval, Content management, Metadata, Big data, Geographic information system, etc.	60	J
60090	High performance computing-related Parallel processing, Distributed processing, Cloud computing, Numerical analysis, Visualization, Computer graphics, High performance computing application, etc.	60	J
60100	Computational science-related Mathematical engineering, Computational mechanics, Numerical simulation, Multi-scale modeling, Large-scale computing, Massively parallel computing, Numerical computing methods, Advanced algorithms, etc.	60	J
61010	Perceptual information processing-related Pattern recognition, Image processing, Computer vision, Visual media processing, Acoustic media processing, Media editing, Media database, Sensing, Sensor fusion, etc.	61	J
61020	Human interface and interaction-related Human interface, Multi-modal interface, Human-computer interaction, Computer supported cooperative work, Virtual reality, Augmented reality, Realistic communication, Wearable device, Usability, Ergonomics, etc.	61	J

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
61030	Intelligent informatics-related Search, Inference, Machine learning, Knowledge acquisition, Intelligent system, Intelligent information processing, Natural language processing, Data mining, Ontology, Agent system, etc.	61	J
61040	Soft computing-related Neural network, Evolutionary computation, Fuzzy theory, Chaos, Complex systems, Probabilistic information processing, etc.	61	J
61050	Intelligent robotics-related Intelligent robot, Behavior and environment recognition, Planning, Sensory behavior system, Autonomous system, Digital human, Real world information processing, Physical agents, Intelligent space, etc.	61	J
61060	Kansei informatics-related Kansei design, Kansei cognitive science, Kansei psychology, Kansei robotics, Kansei measurement evaluation, Kansei interface, Kansei physiology, Kansei material science, Kansei pedagogy, Kansei brain science, etc.	61	J
62010	Life, health and medical informatics-related Bioinformatics, Life informatics, Biological information, Neuroinformatics, Neural information processing, Molecular computing, DNA computing, Medical information, Health information, Medical image, etc.	62	J
62020	Web informatics and service informatics-related Web system, Semantic web, Web mining, Social network analysis, Service engineering, Educational service, Medical service, Welfare service, Social service, Information culture, etc.	62	J
62030	Learning support system-related Media literacy, Learning media, Social media, Learning content, Learning management, Learning support, Remote learning, e-Learning, etc.	62	J
62040	Entertainment and game informatics-related Music information processing, 3D content, Animation, Game programming, Network entertainment, Media art, Digital museum, Experience design, etc.	62	J
63010	Environmental dynamic analysis-related Global warming, Environmental change, Water and material cycle, Ocean, Land, Polar regions, Environmental measurements, Environmental model, Environmental information, Remote sensing, etc.	63	K
63020	Radiation influence-related Radiation, Measurement, Control, Repair, Biological effects, Risk, etc.	63	K
63030	Chemical substance influence on environment-related Toxicology, Toxic substance to human, Trace chemical substance, Endocrine disruptor, Repair, etc.	63	K
63040	Environmental impact assessment-related Atmosphere, Hydrosphere, Terrestrial impact, Impact assessment on human health, Social and economic impacts, Impact assessment on the future generation, Environmental impact assessment, Assessment methods, Monitoring, Simulation, etc.	63	K
64010	Environmental load and risk assessment-related Environmental analysis, Environmental load analysis, Environmental monitoring, Pollution dynamics assessment, Evaluation of radioactive substances dynamics, Environmental modeling, Exposure assessment, Toxicity evaluation, Environmental assessment, Chemical substance management, etc.	64	K
64020	Environmental load reduction and remediation-related Removal of contamination, Treatment of waste material, Control of contamination source, Disposal of waste material, Environmental load reduction, Remediation measure of contamination, Noise and vibration reduction, Countermeasure of ground settlement, Bioremediation, Radioactive decontamination, etc.	64	K

Basic Section	Examples of related research content	Medium-sized Sections and Broad Section corresponding Basic Sections	
		Medium-sized Section	Broad Section
64030	Environmental materials and recycle technology-related Recycle materials, Valuable materials recovery, Separation, refining and purification, Environment-conscious design, Recycle chemistry, Green production, Zero emission, Resource circulation, Renewable energy, Biomass utilization, etc.	64	K
64040	Social-ecological systems-related Biodiversity, Conservation biology, Natural capital, Impact of climate change, Impact analysis on ecosystem, Ecosystem management, Ecosystem restoration, Ecosystem services, Natural tourism resources, Regional environmental planning, etc.	64	K
64050	Sound material-cycle social systems-related Sound material-cycle systems, Material and energy budget analysis, Low carbon society, Unused energy, Regional revitalization, Water use system, Industrial symbiosis, Life cycle assessment (LCA), Integrated environmental management, 3R (reduction, reuse, recycle) social systems, etc.	64	K
64060	Environmental policy and social systems-related Environmental philosophy and ethics, Environmental laws, Environmental economics, Environmental information, Environmental education, Environmental activities, Environmental management and governance, Social and public system, Consensus forming, Sustainable development, etc.	64	K
90010	Design-related Information design, Environmental design, Industrial design, Spatial design, Design history, Theory of design, Design standard, Design support, Evaluation of design, Design education, etc.	1, 23, 61	A, C, J
90020	Library and information science, humanistic and social informatics-related Library science, Information services, Information organizing, Information retrieval, Bibliometrics, Information resources, Information ethics, Digital humanities, Social Informatics, Digital archives, etc.	2, 62	A, J
90030	Cognitive science-related Cognitive science in general, Cognitive models, Kansei, Human factors, Cognitive and brain science, Comparative cognition, Cognitive linguistics, Cognitive engineering, etc.	10, 61	A, J
90110	Biomedical engineering-related Medical imaging, Medical modeling, Biological simulation, Biometrics, Artificial organs, Tissue engineering, Biophysical properties, Biocontrol, Biomechanics, Nanobio systems, etc.	90	D, I
90120	Biomaterials-related Biofunctional materials, Tissue engineering materials, Biocompatible materials, Nanobio materials, Drug delivery systems, Stimuli-sensitive materials, Genetic engineering material, etc.	90	D, I
90130	Medical systems-related Medical ultrasound system, Diagnostic imaging system, Laboratory diagnosis systems, Minimally invasive treatment systems, Remote diagnosis and treatment systems, Organ preservation systems, Medical information systems, Computer-assisted surgery, Medical robot, etc.	90	D, I
90140	Medical technology assessment-related Regulatory science, Safety evaluation, Clinical study, Medical technology ethics, Medical devices, etc.	90	D, I
90150	Medical assistive technology-related Healthcare and rehabilitation engineering, Life assist technology, Care support technology, Accessibility design, Universal design, Rehabilitation and nursing robot, Assist device for artificial internal organ, Rehabilitation devices, Nursing science and engineering, etc.	90	D, I

The Review Section Table (Table for Medium-sized and Broad Sections)

When selecting a review section, applicants should first acquire an overall picture of the review sections based on the Review Section Table (Overview). In addition, check the Review Section Table (Table for Medium-sized and Broad Sections) for the detailed contents of each section and select a review section for their research proposal.

Also, some items of Basic Section may be presented in plural Medium-sized and Broad Sections. The items of Basic Section presented in plural Medium-sized Section are 9 and 3 items among 9 are presented in plural Medium-sized and Broad Sections (as shown below).

In addition, five other Basic Sections (90110-90150) may be presented in only one Medium-sized Section and two Broad Sections.

【Basic sections may be presented in plural Medium-sized and Broad Section】

Basic Section Item	Basic Section Description	Medium-sized Sections corresponding Basic Sections	Broad Sections corresponding Basic Sections
02090	Japanese language education-related	２，９	Ａ
02100	Foreign language education-related	２，９	Ａ
80010	Area studies-related	４，６	Ａ
80020	Tourism studies-related	４，７，８	Ａ
80030	Gender studies-related	４，６，８	Ａ
80040	Quantum beam science-related	１４，１５	Ｂ
90010	Design-related	１，２３，６１	Ａ，Ｃ，Ｊ
90020	Library and information science, humanistic and social informatics-related	２，６２	Ａ，Ｊ
90030	Cognitive science-related	１０，６１	Ａ，Ｊ
90110	Biomedical engineering-related	９０	Ｄ，Ｉ
90120	Biomaterials-related	９０	Ｄ，Ｉ
90130	Medical systems-related	９０	Ｄ，Ｉ
90140	Medical technology assessment-related	９０	Ｄ，Ｉ
90150	Medical assistive technology-related	９０	Ｄ，Ｉ

【Medium-sized section may be presented in plural Broad Section】

Medium-sized Section Item	Medium-sized section Description	Broad Sections corresponding Medium-sized Section
９０	Biomedical engineering and related fields	Ｄ，Ｉ

Broad Section A

Medium-sized Section 1: Philosophy, art, and related fields

Basic Section	Examples of related research content
01010	Philosophy and ethics-related Philosophy in general, Ethics in general, Western philosophy, Western ethics, Japanese philosophy, Japanese ethics, Applied ethics, etc.
01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related Chinese philosophy/thought, Indian philosophy/thought, Buddhist philosophy, Bibliography, Philology, etc.
01030	Religious studies-related History of religions, Philosophy of religion, Theology, Sociology of religion, Psychology of religion, Anthropology of religion, Studies of religious folklore, Mythology, Bibliography, Philology, etc.
01040	History of thought-related History of thought in general, History of Western thought, History of Eastern thought, History of Japanese thought, History of Islamic thought, etc.
01050	Aesthetics and art studies-related Philosophy of art, Aesthetics, Music theory, Theatrical theory, Miscellaneous art studies, etc.
01060	History of arts-related Japanese art, Eastern art, Western art, Contemporary art, Craft, Design, Architecture, Costume, Photography, etc.
01070	Theory of art practice-related Art expression, Arts management, Art policy, Art production, etc.
01080	Sociology of science, history of science and technology-related Sociology of science, History of science, History of technology, History of medicine, Industrial archeology, Philosophy of science, Foundation of science, STS (Science, technology and society), etc.
90010	Design-related Information design, Environmental design, Industrial design, Spatial design, Design history, Theory of design, Design standard, Design support, Evaluation of design, Design education, etc.

Medium-sized Section 2: Literature, linguistics, and related fields

Basic Section	Examples of related research content
02010	Japanese literature-related Japanese literature in general, Ancient literature, Medieval literature, Chinese classics in Japan, Bibliography, Philology, Premodern literature, Modern literature, Contemporary literature, Literary theory, etc.
02020	Chinese literature-related Chinese literature, Bibliography, Philology, Literary theory, etc.
02030	English literature and literature in the English language-related English literature, American literature, Literature in the English language, Literary theory, Bibliography, Philology, etc.
02040	European literature-related French literature, Literature in the French language, German literature, Literature in the German language, Classics, Russian and East European literature, Literature in other European languages, Literary theory, Bibliography, Philology, etc.
02050	Literature in general-related Literature in other languages and areas, Literary theory, Comparative literature, Bibliography, Philology, Literature education, etc.
02060	Linguistics-related Phonetics/phonology, Semantics/pragmatics, Morphosyntax, Sociolinguistics, Contrastive linguistics, Psycholinguistics, Neurolinguistics, Historical linguistics, Corpus linguistics, Endangered and minority languages, etc.

(Broad Section A)

02070	Japanese linguistics-related
	Phonetics/phonology, Writing systems, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Language life, Dialect, History of the Japanese language, History of Japanese linguistics, etc.
02080	English linguistics-related
	Phonetics/phonology, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Sociolinguistics, Diversity of the English language, Corpus linguistics, History of the English language, History of English linguistics, etc.
02090	Japanese language education-related
	Research on learners, Language acquisition, Teaching material, Curriculum evaluation, Japanese language education for specific purposes, Bilingual education, Research on teachers, Japanese language for Japanese language education, History of Japanese language education, Cross-cultural understanding, etc.
02100	Foreign language education-related
	Learning method, Computer-assisted language learning (CALL), Teaching material, Language testing, Theory of second language acquisition, Early English education, History of foreign language education and language policies, Curriculum evaluation, Training foreign language teachers, Cross-cultural understanding, etc.
90020	Library and information science, humanistic and social informatics-related
	Library science, Information services, Information organizing, Information retrieval, Bibliometrics, Information resources, Information ethics, Digital humanities, Social Informatics, Digital archives, etc.

Medium-sized Section 3：History, archaeology, museology, and related fields

Basic Section	Examples of related research content
03010	Historical studies in general-related
	Historical theory, Historical methodology, Research in historical materials, Memory and medium, World history, History of cultural and diplomatic exchange, Comparative history, Global history, Environmental history, History of emotions, etc.
03020	Japanese history-related
	History of ancient Japan, History of medieval Japan, History of early modern Japan, History of modern Japan, History of local Japan, History of external relations, History of culture and religion, History of Japanese environment, History of Japanese city, Research in historical materials, etc.
03030	History of Asia and Africa-related
	Chinese history, East Asian history, Central Eurasian history, Southeast Asian history, Oceanian history, South Asian history, West Asian history, African history, History of cultural and diplomatic exchange, Research in historical materials, etc.
03040	History of Europe and America-related
	Ancient European history, Medieval European history, Modern and contemporary West European history, Modern and contemporary East European history, North and South American history, History of cultural and diplomatic exchange, Comparative history, Research in historical materials, etc.
03050	Archaeology-related
	Archaeology in general, Prehistoric archaeology, Historical archaeology, Japanese archaeology, Ancient civilizations, History of material culture, Experimental archaeology, Information archaeology, Study of buried cultural property, Ecological archeology, etc.
03060	Cultural assets study-related
	Dating methods, Material analysis, Production techniques, Conservation science, Archaeological prospection, Plant and animal residues, Human remains, Cultural heritage, Cultural property policy, Restoration of cultural properties, etc.
03070	Museology-related
	Museum displays and exhibitions, Museum management, Museum collections and documentation, Museum conservation and preservation, Museum education and learning, Museum informatics and media studies, Museum finance and administration, History of museums and museology, etc.

Medium-sized Section 4：Geography, cultural anthropology, folklore, and related fields

Basic Section	Examples of related research content
04010	Geography-related
	Geography in general, Land use, Landscape, Environmental system, Geomorphology, Climatology, Hydrology, Cartography, Geographic information system, Regional planning, etc.

(Broad Section A)

04020	Human geography-related
	Human geography in general, Economic geography, Social geography, Political geography, Cultural geography, Urban geography, Rural geography, Historical geography, Regional geography, Geography education, etc.
04030	Cultural anthropology and folklore-related
	Cultural anthropology in general, Folklore in general, Material culture, Ecology, Social relationship, Religion, Arts, Health care, Border crossing, Minority, etc.
80010	Area studies-related
	Area studies in general, Cross-regional comparative studies, Aid, Social development, Interregional exchange, Environment, Transnationalism, Globalization, Refugees, Conflict, etc.
80020	Tourism studies-related
	Tourism studies in general, Tourism resources, Tourism policy, Tourism industry, Tourist area, Tourists, Tourism culture, Tourism media, Sustainable tourism, Tourism ethics, etc.
80030	Gender studies-related
	Gender studies in general, Feminism, Men's studies, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.

Medium-sized Section 5 : Law and related fields

Basic Section	Examples of related research content
05010	Legal theory and history-related
	Legal philosophy, Roman law, Legal history, Sociology of law, Comparative law, Foreign law, Law and policy, Law and economics, Judicial system, etc.
05020	Public law-related
	Constitutional law, Administrative law, Tax law, etc.
05030	International law-related
	Public international law, Private international law, International human rights law, International economic law, EU law, etc.
05040	Social law-related
	Labor law, Economic law, Social security law, Education law, etc.
05050	Criminal law-related
	Criminal law, Criminal procedure, Criminology, Criminal justice policy, Juvenile law, Law and psychology, etc.
05060	Civil law-related
	Civil law, Commercial law, Civil procedure, Insolvency law, Alternative dispute resolution, etc.
05070	New fields of law-related
	Environmental law, Medical law, Information law, Consumer law, Intellectual property law, Law and gender, Legal profession, etc.

Medium-sized Section 6 : Political science and related fields

Basic Section	Examples of related research content
06010	Politics-related
	Political theory, History of political thought, Political history, Political process, Political participation, Political economy, Public administration, Local government, Comparative politics, Public policy, etc.
06020	International relations-related
	Theory of international relations, International history, Foreign policy, International security, International political economy, Global governance, International cooperation, Peace research, etc.
80010	Area studies-related
	Area studies in general, Cross-regional comparative studies, Aid, Social development, Interregional exchange, Environment, Transnationalism, Globalization, Refugees, Conflict, etc.

(Broad Section A)

80030	Gender studies-related
	Gender studies in general, Feminism, Men's studies, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.

Medium-sized Section 7 : Economics, business administration, and related fields

Basic Section	Examples of related research content
07010	Economic theory-related
	Microeconomics, Macroeconomics, Game theory, Behavioral economics, Experimental economics, Economic theory, Evolutionary economics, Economic institutions, Economic systems, etc.
07020	Economic doctrines and economic thought-related
	Economic doctrines, Economic thought, Social thought, Economic philosophy, etc.
07030	Economic statistics-related
	Statistical system, Statistical research, Economic statistics, Big data, Econometrics, Financial econometrics, etc.
07040	Economic policy-related
	Economic policy, Industrial organization, International economics, Development economics, Environmental and resource economics, Japanese economy, Regional economy, Urban economics, Transportation economics, Spatial economics, etc.
07050	Public economics and labor economics-related
	Public finance, Public economics, Health economics, Labor economics, Social security, Education economics, Law and economics, Political economy, Demography, etc.
07060	Money and finance-related
	Monetary economics, Finance, International finance, Corporate finance, Financial engineering, Insurance, etc.
07070	Economic history-related
	Economic history, Business history, Industrial history, etc.
07080	Business administration-related
	Organization theory, Corporate strategy, Organizational behavior, Corporation theory, Corporate governance theory, Human resource management, Technology/Innovation management theory, International business, Management information, Business administration in general, etc.
07090	Commerce-related
	Marketing, Consumer behavior, Distributive sciences, Logistics, Commerce in general, etc.
07100	Accounting-related
	Financial accounting, Management accounting, Auditing, Accounting in general, etc.
80020	Tourism studies-related
	Tourism studies in general, Tourism resources, Tourism policy, Tourism industry, Tourist area, Tourists, Tourism culture, Tourism media, Sustainable tourism, Tourism ethics, etc.

Medium-sized Section 8 : Sociology and related fields

Basic Section	Examples of related research content
08010	Sociology-related
	Sociology in general, Community, Family, Labor, Stratification, Culture, Media, Ethnicity, Social movements, Social research, etc.
08020	Social welfare-related
	Social work, Social policy, Social welfare history, Child welfare, Social welfare for people with disabilities, Social welfare for aging, Community welfare, Poverty, Volunteerism, Social welfare in general, etc.

(Broad Section A)

08030	Family and consumer sciences, and culture and living-related
	Dress and fashion, Diet habits, Housing, Family resource management, Family relations, Lifestyle, Culture and living, Family and consumer education, Family and consumer sciences in general, etc.
80020	Tourism studies-related
	Tourism studies in general, Tourism resources, Tourism policy, Tourism industry, Tourist area, Tourists, Tourism culture, Tourism media, Sustainable tourism, Tourism ethics, etc.
80030	Gender studies-related
	Gender studies in general, Feminism, Men's studies, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.

Medium-sized Section 9 : Education and related fields

Basic Section	Examples of related research content
09010	Education-related
	History of education, Philosophy of education, Curriculum and pedagogy, Teacher and trainer, School education, Social and community education, Institutions and administration, Comparative education, Educational administration, etc.
09020	Sociology of education-related
	Sociology of education, Socialization, Educational community, Destination and career formation, Class disparities, Gender, Education policy, Globalization and development, etc.
09030	Childhood and nursery/pre-school education-related
	Childhood, Nursery/pre-school education, Right of child, Development, Contents and methods of child care, Childcare facilities and kindergarten, Caregiver and pre-school teacher, Child care support, Childhood culture, History and thought, etc.
09040	Education on school subjects and primary/secondary education-related
	Education of individual subjects, Lessons of each subject area, Instructional guidance, Teacher education, Special activities, Integrated studies, Moral education, etc.
09050	Tertiary education-related
	Policy, Admission and articulation, Curriculum, Career guidance, Teacher and staff, Scientific research, Regional link and contribution, Globalization, Management and governance, Non-university higher education, etc.
09060	Special needs education-related
	Philosophy and history, Inclusion and cohesive society, Instructions and supports, Developmental disabilities, Emotional disturbance, Intellectual disabilities, Language disorders, Physical disabilities, Career education, etc.
09070	Educational technology-related
	Curriculum development, Teaching-learning support systems, Utilization of media, Utilization of ICT, Teacher's education, Information literacy, etc.
09080	Science education-related
	Science education, Science communication, Scientific literacy, Science and society, STEM education, etc.
02090	Japanese language education-related
	Research on learners, Language acquisition, Teaching material, Curriculum evaluation, Japanese language education for specific purposes, Bilingual education, Research on teachers, Japanese language for Japanese language education, History of Japanese language education, Cross-cultural understanding, etc.
02100	Foreign language education-related
	Learning method, Computer-assisted language learning (CALL), Teaching material, Language testing, Theory of second language acquisition, Early English education, History of foreign language education and language policies, Curriculum evaluation, Training foreign language teachers, Cross-cultural understanding, etc.

Medium-sized Section 10 : Psychology and related fields

Basic Section	Examples of related research content
10010	Social psychology-related
	Social psychology in general, Self, Group, Attitude and behavior, Affection/emotion, Interpersonal relation, Social issues, Culture, etc.

(Broad Section A)	10020	Educational psychology-related
		Educational psychology in general, Development, Family, School, Clinical practice, Personality, Learning, Assessment and evaluation, etc.
	10030	Clinical psychology-related
		Clinical psychology in general, Psychological disorder, Assessment, Psychological intervention, Training, Mental health, Crime and delinquency, Community, etc.
	10040	Experimental psychology-related
		Experimental psychology in general, Sensation, Perception, Attention, Memory, Language, Emotion, Learning, etc.
	90030	Cognitive science-related
		Cognitive science in general, Cognitive models, Kansei, Human factors, Cognitive and brain science, Comparative cognition, Cognitive linguistics, Cognitive engineering, etc.

Broad Section B

Medium-sized Section 11 : Algebra, geometry, and related fields

Basic Section	Examples of related research content
11010	Algebra-related
	Group theory, Ring theory, Representation theory, Algebraic combinatorics, Number theory, Arithmetic geometry, Algebraic geometry, Algebraic analysis, etc.
11020	Geometry-related
	Differential geometry, Riemannian geometry, Symplectic geometry, Complex geometry, Topology, Differential topology, Low dimensional topology, etc.

Medium-sized Section 12 : Analysis, applied mathematics, and related fields

Basic Section	Examples of related research content
12010	Basic analysis-related
	Functional analysis, Complex analysis, Probability theory, Harmonic analysis, Operator theory, Spectral analysis, Operator algebras, Algebraic analysis, Representation theory, etc.
12020	Mathematical analysis-related
	Functional equations, Real analysis, Dynamical system, Variational method, Nonlinear analysis, Applied analysis, etc.
12030	Basic mathematics-related
	Mathematical logic and foundations, Information theory, Discrete mathematics, Computer mathematics, History of mathematics, etc.
12040	Applied mathematics and statistics-related
	Numerical analysis, Mathematical modelling, Optimal control, Game theory, Statistical mathematics, etc.

Medium-sized Section 13 : Condensed matter physics and related fields

Basic Section	Examples of related research content
13010	Mathematical physics and fundamental theory of condensed matter physics-related
	Statistical physics, Fundamental theory of condensed matter physics, Mathematical physics, Nonequilibrium nonlinear physics, Fluid dynamics, Computational physics, Quantum information theory, etc.
13020	Semiconductors, optical properties of condensed matter and atomic physics-related
	Semiconductors, Dielectrics, Atoms and molecules, Mesoscopic systems, Crystals, Surfaces and interfaces, Optical properties of condensed matter, Quantum electronics, Quantum information, etc.
13030	Magnetism, superconductivity and strongly correlated systems-related
	Magnetism, Strongly correlated electron systems, Superconductivity, Quantum fluids and solids, Molecular solids, etc.
13040	Biophysics, chemical physics and soft matter physics-related
	Physics of biological phenomena, Physics of biological matters, Liquids and glasses, Soft matters, Rheology, etc.

(Broad Section B)

Medium-sized Section 14: Plasma science and related fields

Basic Section	Examples of related research content
14010	Fundamental plasma-related Basic plasmas, Magnetized plasmas, Laser plasmas, Strongly coupled plasmas, Plasma diagnostics, Astrophysical and space plasmas, etc.
14020	Nuclear fusion-related Plasma confinement, Plasma control, Plasma heating, Plasma diagnostics, Edge plasma, Plasma wall interaction, Inertial fusion, Fusion material, Fusion system, etc.
14030	Applied plasma science-related Plasma processing, Plasma material science, General plasma applications, etc.
80040	Quantum beam science-related Accelerators, Beam physics, Radiation detectors, Beam control, Applied quantum beam science, etc.

Medium-sized Section 15: Particle-, nuclear-, astro-physics, and related fields

Basic Section	Examples of related research content
80040	Quantum beam science-related Accelerators, Beam physics, Radiation detectors, Beam control, Applied quantum beam science, etc.
15010	Theoretical studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.
15020	Experimental studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.

Medium-sized Section 16: Astronomy and related fields

Basic Section	Examples of related research content
16010	Astronomy-related Theoretical astronomy, Radio astronomy, Optical/infrared astronomy, X-ray/γ-ray astronomy, Astrometry, Solar physics, Exoplanet astronomy, etc.

Medium-sized Section 17: Earth and planetary science and related fields

Basic Section	Examples of related research content
17010	Space and planetary sciences-related Solar-terrestrial physics, Aeronomy, Planetary science, Exoplanetary science, Extraterrestrial material science, etc.
17020	Atmospheric and hydrospheric sciences-related Climate system, Atmospheric science, Ocean science, Limnology, Glaciology, Paleoclimatology, etc.
17030	Human geosciences-related Geoenvironmental science, Natural disaster science, Geospatial information science, Quaternary research, Earth resources science, etc.
17040	Solid earth sciences-related Solid earth geophysics, Geology, Earth's interior material science, Solid earth geochemistry, etc.
17050	Biogeosciences-related Origin and evolution of life, Extremophile biology, Biogeochemistry, Paleoenvironmental science, Paleontology, etc.

Broad Section C

Medium-sized Section 18 : Mechanics of materials, production engineering, design engineering, and related fields

Basic Section	Examples of related research content
18010	Mechanics of materials and materials-related
	Structural mechanics, Fatigue, Fracture, Biomaterials, Material design, Material characteristics, Material evaluation, etc.
18020	Manufacturing and production engineering-related
	Machining, Non-traditional machining, Ultraprecision machining, Machine tools, Manufacturing systems, Precision metrology, Process planning, etc.
18030	Design engineering-related
	Mechanical design, Product design, Design theory, Design for reliability, Optimal design, Computer-aided design, etc.
18040	Machine elements and tribology-related
	Machine elements, Mechanisms, Tribology, Actuators, Micromachines, etc.

Medium-sized Section 19 : Fluid engineering, thermal engineering, and related fields

Basic Section	Examples of related research content
19010	Fluid engineering-related
	Fluid machinery, Flow measurement, Computational fluid dynamics, Turbulence, Multiphase flow, Compressible flow, Incompressible flow, etc.
19020	Thermal engineering-related
	Heat transfer, Convection, Combustion, Thermophysical properties, Refrigeration and air-conditioning, Heat engine, Energy conversion, etc.

Medium-sized Section 20 : Mechanical dynamics, robotics, and related fields

Basic Section	Examples of related research content
20010	Mechanics and mechatronics-related
	Kinematics, Kinetics, Vibration, Acoustics, Automation, Biomechanics, Instrument and control applications, Mechatronics applications, etc.
20020	Robotics and intelligent system-related
	Robotics, Intelligent system, Human mechanical system, Human interface, Planning, Intelligent spatial system, Virtual reality, Augmented reality, etc.

Medium-sized Section 21 : Electrical and electronic engineering and related fields

Basic Section	Examples of related research content
21010	Power engineering-related
	Electrical energy-related, Energy conservation, Power system engineering, Electric machinery, Power electronics, Effective utilization of electric energy, Electromagnetic compatibility, Wireless power transfer, etc.
21020	Communication and network engineering-related
	Information theory, Nonlinear theory, Signal processing, Communication systems, Modulation/demodulation, Antennas, Networks, Multimedia, Cryptography/security, etc.
21030	Measurement engineering-related
	Measurement theory, Measuring instruments, Applied wave metrology, Measurement systems, Signal processing, Sensing, etc.
21040	Control and system engineering-related
	Control theory, System theory, Control systems, Knowledge-based control systems, System information processing, System control applications, Biosystems engineering, etc.
21050	Electric and electronic materials-related
	Semiconductor, Dielectric materials, Magnetic materials, Organic materials, Superconductor, Composite materials, Thin films, Functional materials, Thick films, Fabrication/characterization methods, etc.

(Broad Section C)

21060	Electron device and electronic equipment-related
	Electron devices, Circuit design, Optical devices, Spintronic devices, Millimeter wave/terahertz wave, Applied wave devices, Storage devices, Displays, Process technology, Implementation technology, etc.

Medium-sized Section 22 : Civil engineering and related fields

Basic Section	Examples of related research content
22010	Civil engineering material, execution and construction management-related
	Concrete, Steel, Composite material, Wood, Pavement material, Repair and reinforce material, Execution, Maintenance, Construction management, etc.
22020	Structure engineering and earthquake engineering-related
	Applied mechanics, Structure engineering, Steel structure, Concrete structure, Composite structure, Wind engineering, Earthquake engineering, Aseismatic structure, Earthquake prevention, etc.
22030	Geotechnical engineering-related
	Soil mechanics, Foundation engineering, Rock engineering, Engineering geology, Ground behavior, Geotechnical structures, Geo-disaster prevention, Geo-environment, Tunnel engineering, etc.
22040	Hydroengineering-related
	Hydraulics, Environmental hydraulics, Hydrology, River engineering, Water resource engineering, Coastal engineering, Port and harbor engineering, Ocean engineering, etc.
22050	Civil engineering plan and transportation engineering-related
	Civil engineering plan, Regional urban planning, Spatial planning, Disaster prevention plan, Transportation plan, Transportation engineering, Railway engineering, Surveying and remote sensing, Landscape design, Civil engineering history, etc.
22060	Environmental systems for civil engineering-related
	Environment plan, Environmental system, Environment conservation, Water serve and drainage systems, Waste, Water environment, Atmospheric circulation, Noise and vibration, Environment ecology, Environmental monitoring, etc.

Medium-sized Section 23 : Architecture, building engineering, and related fields

Basic Section	Examples of related research content
23010	Building structures and materials-related
	Load theory, Structural analysis, Structural design, Structures, Earthquake resistant design, Foundation, Geotechnics, Structural material, Maintenance, Building construction method, etc.
23020	Architectural environment and building equipment-related
	Sound environment, Vibration environment, Light environment, Heat environment, Air environment, Environmental psychology/physiology, Building equipment, Fire engineering, Urban environment, Environment design, etc.
23030	Architectural planning and city planning-related
	Planning theory, Design theory, Housing theory, Buildings, Urban/regional planning, Administration, Building economics, Production management, Disaster prevention planning, Landscape, etc.
23040	Architectural history and design-related
	Architectural history, Urban history, Architectural theory, Design, Landscape, Preservation, Renovation, etc.
90010	Design-related
	Information design, Environmental design, Industrial design, Spatial design, Design history, Theory of design, Design standard, Design support, Evaluation of design, Design education, etc.

Medium-sized Section 24 : Aerospace engineering, marine and maritime engineering, and related fields

Basic Section	Examples of related research content
24010	Aerospace engineering-related
	Thermo-fluid dynamics, Structural mechanics, Propulsion, Aerospace craft design, Production engineering, Aircraft system, Aerodynamics, Spacecraft system, Space utilization, etc.
24020	Marine engineering-related
	Navigation, Structural mechanics, Structural design, Production technology, Marine propulsion, Marine transport, Marine development, Underwater engineering, Polar engineering, Marine environmental technology, etc.

(Broad Section C)

Medium-sized Section 25: Social systems engineering, safety engineering, disaster prevention engineering, and related fields

Basic Section	Examples of related research content
25010	Social systems engineering-related Social systems, Industrial engineering, Operations research, Industrial management, Reliability engineering, Policy science, Regulatory science, Quality control, etc.
25020	Safety engineering-related Safety engineering, Safety system, Risk engineering, Risk management, Work safety, Industrial safety, Product safety, Safety information, Human engineering, Liability engineering, etc.
25030	Disaster prevention engineering-related Disaster prediction, Hazard map, Building prevention against disaster, Lifeline prevention against disaster, Regional disaster prevention planning, Risk evaluation of disaster, Disaster prevention policy, Disaster resilience, etc.

Broad Section D

Medium-sized Section 26: Materials engineering and related fields

Basic Section	Examples of related research content
26010	Metallic material properties-related Electric and magnetic properties, Metastable states, Diffusion, Phase transformation, Phase diagram, Lattice defect, Mechanical properties, Thermal and optical properties, Materials computational science, Microstructure analysis, etc.
26020	Inorganic materials and properties-related Functional ceramics, Glass, Engineering ceramics, Carbon-based materials, Crystal structure analysis, Microstructure, Electric properties, Mechanical properties, Physical and chemical properties, Grain boundary, etc.
26030	Composite materials and interfaces-related Functional composite materials, Structural composite materials, Biocompatible composite materials, Polymer composite, Surface treatment, Bonding and joining, Interface properties, Gradient function, etc.
26040	Structural materials and functional materials-related Infrastructural materials, Structural materials, Functional materials, Medical welfare materials, Reliability, Sensor materials, Energy materials, Battery materials, Environmental materials, etc.
26050	Material processing and microstructure control-related Processing and molding, Molding, Weld joining, Crystal microstructure control, Laser processing, Precision processing, Polishing, Powder metallurgy, Coating, Corrosion and protection, etc.
26060	Metals production and resources production-related Separation and purification, Melting and solidifying, Crystal growth, Casting, Scarce resources substitution, Low environment impact, Recycle, etc.

Medium-sized Section 27: Chemical engineering and related fields

Basic Section	Examples of related research content
27010	Transport phenomena and unit operations-related Phase equilibrium, Transport properties, Fluid-phase unit operation, Adsorption, Membrane separation, Stir mixing, Powder and particle, Crystallization, Film formation, Supercritical, etc.
27020	Chemical reaction and process system engineering-related Reaction operation, Novel reaction process, Reaction mechanism, Reactor design, Materials synthesis process, Microreactor, Process control, Process system design, Process informatics, etc.
27030	Catalyst and resource chemical process-related Catalyst preparation, Catalytic function, Energy conversion process, Energy technology, Resources effective utilization technology, Catalytic material, Active site analysis, etc.

(Broad Section D)

27040	Biofunction and bioprocess engineering-related
	Biocatalyst engineering, Biofunction engineering, Food engineering, Medicochemical engineering, Bioproduction process, Bioreactor, Bioseparation, Biosensor, Biorefinery, etc.

Medium-sized Section 28 : Nano/micro science and related fields

Basic Section	Examples of related research content
28010	Nanometer-scale chemistry-related
	Nanoparticle chemistry, Mesoscopic chemistry, Nanostructure control, Self-assembly, Nanocarbons, Molecular devices, Nanointerface function, Nanospace function, etc.
28020	Nanostructural physics-related
	Physics in nanoscale materials and structures, Nanoprobes, Quantum dots, Quantum devices, Electron devices, Spin devices, Nano optical device, Nanotribology, Nanocarbon physics, etc.
28030	Nanomaterials-related
	Creation of nanomaterials, Analysis of nanomaterials, Nanosurfaces and nanointerfaces, Functional nanomaterials, Nanoparticles, Carbon nanomaterials, Two-dimensional materials, Nanocrystalline materials, Nanocomposites, Nanofabrication process, etc.
28040	Nanobioscience-related
	Biomolecular devices, Molecular manipulation, Molecular imaging, Nanomeasurements, Nanosynthesis, Single molecule science, Nano-bio interfaces, Biomolecular array, Genome engineering, etc.
28050	Nano/micro-systems-related
	MEMS, NEMS, BioMEMS, Nano/micro-fabrication, Nano/micro-chemical systems, Nano/micro-biosystems, Nano/micro-mechanics, Nano/micro-sensors, etc.

Medium-sized Section 29 : Applied condensed matter physics and related fields

Basic Section	Examples of related research content
29010	Applied physical properties-related
	Magnetic materials, Superconductors, Dielectrics, Fine particles, Liquid crystals, New functional materials, Molecular electronics, Bioelectronics, Spintronics, etc.
29020	Thin film/surface and interfacial physical properties-related
	Thin-film engineering, Surface and interfacial engineering, Surface science, Vacuum, Measurement, Analysis, Nanoscopic technology, Advanced equipment, Electronics application, etc.
29030	Applied condensed matter physics-related
	Elementary quantities, Standards, Units, Physical quantity measurements and detection, Energy conversion, etc.

Medium-sized Section 30 : Applied physics and engineering and related fields

Basic Section	Examples of related research content
30010	Crystal engineering-related
	Metal, Semiconductor, Ceramics, Amorphous, Crystal growth, Artificial structures, Device structure, Crystal characterization, Plasma process, etc.
30020	Optical engineering and photon science-related
	Optical materials, Optical elements, Optical properties, Optical information processing, Laser, Optical sensing, Optical recording, Opto-electronics, Nonlinear optics, Quantum optics, etc.

Medium-sized Section 31 : Nuclear engineering, earth resources engineering, energy engineering, and related fields

Basic Section	Examples of related research content
31010	Nuclear engineering-related
	Reactor physics, Nuclear safety, Thermal-hydraulics and structure, Fuel material, Nuclear chemistry, Nuclear life cycle, Radiation safety, Radiation engineering, Fusion reactor engineering, Nuclear social environment, etc.

(Broad Section D)

31020	Earth resource engineering, Energy sciences-related
	Resource prospecting, Resource development, Resource cycle, Resource economy, Energy system, Environmental load, Renewable energy, Natural resources and energy policy, etc.

Medium-sized Section 90: Biomedical engineering and related fields

Basic Section	Examples of related research content
90110	Biomedical engineering-related
	Medical imaging, Medical modeling, Biological simulation, Biometrics, Artificial organs, Tissue engineering, Biophysical properties, Biocontrol, Biomechanics, Nanobio systems, etc.
90120	Biomaterials-related
	Biofunctional materials, Tissue engineering materials, Biocompatible materials, Nanobio materials, Drug delivery systems, Stimuli-sensitive materials, Genetic engineering material, etc.
90130	Medical systems-related
	Medical ultrasound system, Diagnostic imaging system, Laboratory diagnosis systems, Minimally invasive treatment systems, Remote diagnosis and treatment systems, Organ preservation systems, Medical information systems, Computer-assisted surgery, Medical robot, etc.
90140	Medical technology assessment-related
	Regulatory science, Safety evaluation, Clinical study, Medical technology ethics, Medical devices, etc.
90150	Medical assistive technology-related
	Healthcare and rehabilitation engineering, Life assist technology, Care support technology, Accessibility design, Universal design, Rehabilitation and nursing robot, Assist device for artificial internal organ, Rehabilitation devices, Nursing science and engineering, etc.

Broad Section E

Medium-sized Section 32: Physical chemistry, functional solid state chemistry, and related fields

Basic Section	Examples of related research content
32010	Fundamental physical chemistry-related
	Gas, Liquid, Solid, Nanomaterials, Bio-related materials, Structure and properties, Chemical reactions, Spectroscopy, Theoretical calculation, Data science, etc.
32020	Functional solid state chemistry-related
	Molecular materials, Inorganic compounds, Hybrid compounds, Colloids, Surface/interface, Electrical properties, Optical properties, Magnetic properties, Energy conversion, Catalysis, etc.

Medium-sized Section 33: Organic chemistry and related fields

Basic Section	Examples of related research content
33010	Structural organic chemistry and physical organic chemistry-related
	Chemistry of organic crystals, Molecular recognition, Supermolecules, Functional organic molecules, Extended π-electron molecules, Organoelement chemistry, Reaction mechanism, Molecular chirality, Theoretical organic chemistry, etc.
33020	Synthetic organic chemistry-related
	Development of reactions, Reaction mechanism, Selective reactions, Asymmetric synthesis, Development of catalysts, Biocatalysis, Sustainable organic synthesis, Natural product synthesis, Process chemistry, etc.

(Broad Section E)

Medium-sized Section 34: Inorganic/coordination chemistry, analytical chemistry, and related fields

Basic Section	Examples of related research content
34010	Inorganic/coordination chemistry-related
	Coordination chemistry, Organometallic chemistry, Inorganic solid-state chemistry, Bioinorganic chemistry, Solution chemistry, Clusters, Supramolecular complexes, Coordination polymers, Typical elements, Physical properties and functions, etc.
34020	Analytical chemistry-related
	Spectrometric analysis, Advanced measurements, Surface/interface analysis, Separation analysis, Analytical reagents, Radiochemical analysis, Electrochemical analysis, Bioanalysis, New analysis methods, etc.
34030	Green sustainable chemistry and environmental chemistry-related
	Green process, Green catalysts, Recycle, Environmental assessment, Environmentally conscious materials, Reduction of environmental load, Environmental restoration, Resource saving, Geochemistry, Environmental radioactivity, etc.

Medium-sized Section 35: Polymers, organic materials, and related fields

Basic Section	Examples of related research content
35010	Polymer chemistry-related
	Polymer synthesis, Polymer reactions, Functional polymers, Self-assembled polymers, Non-covalent polymers, Chiral polymers, Bio-related polymers, Polymer properties, Polymer structures, Polymer interface, etc.
35020	Polymer materials-related
	Properties of polymer materials, Synthesis of polymer materials, Functional polymer materials, Environmentally friendly polymer materials, Liquid crystal polymers, Gel, Biopolymers, Polymer composites, Polymer processing, etc.
35030	Organic functional materials-related
	Organic semiconductors, Liquid crystals, Optical materials, Device-related materials, Electrically conductive materials, Hybrid materials, Molecular functional materials, Organic hybrid materials, Materials for energy conversion, etc.

Medium-sized Section 36: Inorganic materials chemistry, energy-related chemistry, and related fields

Basic Section	Examples of related research content
36010	Inorganic compounds and inorganic materials chemistry-related
	Crystals, Amorphous, Ceramics, Semiconductors, Inorganic device-related materials, Low-dimensional compounds, Porous materials, Nanoparticles, Multicomponent compounds, Hybrid materials, etc.
36020	Energy-related chemistry
	Energy resources, Energy conversion materials, Energy carriers, Solar energy utilization, Material separation, Catalytic transformation, Battery and electrochemical materials, Energy-saving materials, Renewable energy, Unused energy, etc.

Medium-sized Section 37: Biomolecular chemistry and related fields

Basic Section	Examples of related research content
37010	Bio-related chemistry
	Bioorganic chemistry, Bioinorganic chemistry, Biological reaction engineering, Biofunctional chemistry, Biofunctional materials, Biotechnology, etc.
37020	Chemistry and chemical methodology of biomolecules-related
	Natural product chemistry, Biologically active compounds, Molecular mechanism of biological activities, Biofunctional molecules, Combinatorial chemistry, Metabolomic analysis, etc.
37030	Chemical biology-related
	In vivo functional expression, Intracellular chemical reactions, Drug discovery science, Chemical library, Structure-activity relationship, Chemical probes, Biomolecular measurements, Molecular imaging, Proteomics, etc.

Broad Section F

Medium-sized Section 38: Agricultural chemistry and related fields

Basic Section	Examples of related research content
38010	Plant nutrition and soil science-related Plant metabolism and physiology, Nutritional elements in plants, Soil classification, Soil physical chemistry, Soil organisms, etc.
38020	Applied microbiology-related Microbial genetics/breeding, Microbial function, Microbial metabolism and physiology, Microbial applications, Control of microbes, Microbial ecology, Production of useful materials, etc.
38030	Applied biochemistry-related Cellular biochemistry, Applied biochemistry, Structural biology, Regulation of bioactivity, Metabolism and physiology, Cellular function, Molecular function, Production of useful materials, etc.
38040	Bioorganic chemistry-related Bioactive substances, Signal molecules, Natural products chemistry, Biosynthesis, Structure-activity relationship, Synthetic organic chemistry, Chemical biology, etc.
38050	Food sciences-related Food function, Food chemistry, Nutritional chemistry, Food analysis, Food engineering, Food safety, Functional food, Nutritional epidemiology, Clinical nutrition, etc.
38060	Applied molecular and cellular biology-related Molecular cell biology, Cellular bioengineering, Molecular engineering, Gene expression control, Cell-cell/intermolecular interactions, Cellular function, Production of useful materials, etc.

Medium-sized Section 39: Agricultural and environmental biology and related fields

Basic Section	Examples of related research content
39010	Science in plant genetics and breeding-related Genetic resources, Breeding theories, Genomic breeding, Plants with novel traits, Quality components, Stress tolerance, Yielding ability, Reproduction and multiplication, Growth physiology, Development, etc.
39020	Crop production science-related Field crops, Crop yield, Crop product quality, Crop morphology, Growth prediction, Crop physiology, Field management, Low-cost cultivation techniques, Environmentally friendly agriculture, Field ecosystem, etc.
39030	Horticultural science-related Plant growth, flowering, and fruit development, Nursery plant propagation and production, Crop production systems, Cultivation techniques, Protected horticulture, Controlled environment systems, Breeding and development of new cultivars, Quality of horticultural products, Postharvest physiology and management, Socio-horticulture, etc.
39040	Plant protection science-related Plant pathology, Clinical plant science, Agricultural insect pest, Natural enemy, Weed, Agricultural chemicals, Integrated pest management, etc.
39050	Insect science-related Sericulture insect technology, Insect genetics, Insect pathology, Insect physiology and biochemistry, Insect ecology, Chemical ecology, Systematics, Symbiosis and parasitism, Social insects, Medical entomology, etc.
39060	Conservation of biological resources-related Conservation biology, Biodiversity conservation, Conservation of phylogenetic diversity, Genetic resources conservation, Ecosystem conservation, Conservation of microorganisms, Impacts of non-native species, etc.
39070	Landscape science-related Landscape architecture, Parks and open space planning, Landscape planning, Cultural landscape, Nature conservation, Landscape ecology, Parks and open space management, Parks, Environmental greening, Participatory community design, etc.

(Broad Section F)

Medium-sized Section 40: Forestry and forest products science, applied aquatic science, and related fields

Basic Section	Examples of related research content
40010	Forest science-related Forest ecology, Forest biodiversity, Forest genetics and breeding, Silviculture, Forest protection, Forest environments, Erosion control, Forest utilization, Forest planning, Forest policy, etc.
40020	Wood science-related Wood structure, Wood property, Lignocellulose, Trace element, Fungus, Wood processing, Biomass-refinery, Wood based material, Wooden building, Forest products education, etc.
40030	Aquatic bioproduction science-related Aquatic environment, Fisheries, Aquatic resource management, Aquatic organisms, Aquatic ecosystem, Aquaculture, Fisheries engineering, Fishing community/fisheries policy, Fisheries economics/management/marketing, Fisheries education, etc.
40040	Aquatic life science-related Aquatic nutrition, Aquatic pathology, Aquatic genetics/heredity/breeding, Aquatic physiology, Utilization of aquatic organisms and biomass, Aquatic biological chemistry, Aquatic biotechnology, Aquatic food sciences, etc.

Medium-sized Section 41: Agricultural economics and rural sociology, agricultural engineering, and related fields

Basic Section	Examples of related research content
41010	Agricultural and food economics-related Food economy, Agricultural production economy, Agricultural policy, Food system, Food marketing, International agricultural development, Trade of agricultural commodities and livestock products, Rural resources and environment, etc.
41020	Rural sociology and agricultural structure-related Farm organization, Farm management, Agricultural structure, Agricultural market, Agricultural history, Rural society, Rural life, Agricultural cooperative, etc.
41030	Rural environmental engineering and planning-related Irrigation and drainage, Reclamation and conservation of agricultural land, Rural planning, Rural environment, Circulation of resources and energy, Disaster prevention in rural area, Stock management of agricultural infrastructures, Hydrodynamics and hydrology, Soil physics, Design and construction materials, etc.
41040	Agricultural environmental engineering and agricultural information engineering-related Agricultural production facilities, Bioproduction machinery, Environmental control, Agricultural meteorology and micrometeorology, Agricultural information, Greenhouse horticulture, Plant factory, Postharvest and supply chain, Nondestructive measurement, Remote sensing and geographic information system, etc.
41050	Environmental agriculture-related Biomass, Environmental manipulation, Biodiversity, Environmental analysis, Ecosystem services, Resources circulation system, Low-carbon societies, Life-cycle assessment, Environmental friendly agriculture, Watershed management, etc.

Medium-sized Section 42: Veterinary medical science, animal science, and related fields

Basic Section	Examples of related research content
42010	Animal production science-related Breeding/genetics, Reproduction, Nutrition/feeding, Anatomy/physiology, Product, Environment, Behavior, Therapy, Grassland, Grazing, etc.
42020	Veterinary medical science-related Basic veterinary science, Pathological veterinary science, Applied veterinary science, Clinical veterinary science, Animal nursing, Animal welfare, Wildlife, etc.
42030	Animal life science-related Homeostasis, Cellular function, Biological defense, Integrated genetics, Development/differentiation, Biotechnology, etc.
42040	Laboratory animal science-related Genetic engineering, Developmental engineering, Animal models of disease, Facility management, Laboratory animal welfare, Laboratory animal-related technology, Bioresource, etc.

Broad Section G

Medium-sized Section 43: Biology at molecular to cellular levels, and related fields

Basic Section	Examples of related research content
43010	Molecular biology-related Chromosome function, Chromatin, Epigenetics, Genome maintenance, Genome transmission, Chromosome re-organization, Gene expression, Non-coding RNA, Regulation of protein function, Molecular genetics, Regulation of RNA function, etc.
43020	Structural biochemistry-related Proteins, Nucleic acids, Lipids, Carbohydrates, Biological membrane, Molecular recognition, Denaturation, Three-dimensional structural analysis, Three-dimensional structural prediction, Molecular dynamics, etc.
43030	Functional biochemistry-related Enzymes, Sugar chain, Bioenergy conversion, Biological trace elements, Physiologically active substances, Cell signaling, Membrane transport, Proteolysis, Molecular recognition, Organelle, etc.
43040	Biophysics-related Structure biology, Physical property of biomolecules, Biomembrane, Photobiology, Molecular motor, Biometrics, Bioimaging, Systems biology, Synthetic biology, Theoretical biology, etc.
43050	Genome biology-related Genome organization, Genome function, Genome diversity, Molecular evolution of genome, Genome repair/maintenance, Trans-omics, Epigenome, Gene resource, Genome dynamics, etc.
43060	System genome science-related Network analyses, Synthetic biology, Biological databases, Bioinformatics, Genome analysis technology, Genome biotechnology, etc.

Medium-sized Section 44: Biology at cellular to organismal levels, and related fields

Basic Section	Examples of related research content
44010	Cell biology-related Cytoskeleton, Proteolysis, Organelle, Nuclear structure and function, Extracellular matrix, Signal transduction, Cell cycle, Cell motility, Cell-cell interaction, Cellular genetics, etc.
44020	Developmental biology-related Cell differentiation, Stem cells, Regeneration, Germ layer formation, Morphogenesis, Organogenesis, Fertilization, Germ cells, Developmental genetics, Evolution and development, etc.
44030	Plant molecular biology and physiology-related Photosynthesis, Growth physiology, Plant development, Organelle, Cell wall, Responses to environment, Plant-microbe interaction, Metabolism, Plant molecular function, etc.
44040	Morphology and anatomical structure-related Morphology, Comparative morphology, Morphological modeling, Ultrastructure, Morphological image analysis, Tissue organization, Microscopic technology, Imaging, etc.
44050	Animal physiological chemistry, physiology and behavioral biology-related Metabolic physiology, Neurophysiology, Neuroethology, Behavioral physiology, Animal physiological chemistry, Chronobiology, Comparative physiology, Comparative endocrinology, Behavioral genetics, etc.

Medium-sized Section 45: Biology at organismal to population levels and anthropology, and related fields

Basic Section	Examples of related research content
45010	Genetics-related Molecular genetics, Cellular genetics, Developmental genetics, Behavioral genetics, Population genetics, Quantitative trait, Population genomics, Genome-wide association study, Genetic diversity, Epigenome diversity, etc.
45020	Evolutionary biology-related Molecular evolution, Evolutionary genetics, Phenotypic evolution, Evolutionary developmental biology, Evolution of ecological traits, Evolution of behaviors, Experimental evolution, Coevolution, Speciation, Evolutionary theory, etc.

(Broad Section G)

45030	Biodiversity and systematics-related
	Taxonomic characters, Taxon, Classification system, Molecular phylogeny, Phyletic evolution, Speciation, Natural history, Biogeography, Rare species conservation, Biodiversity, etc.
45040	Ecology and environment-related
	Chemical ecology, Molecular ecology, Physiological ecology, Evolutionary ecology, Behavioral ecology, Population ecology, Community ecology, Conservation ecology, Biological interactions, Material cycles in ecosystems, etc.
45050	Physical anthropology-related
	Morphology and function, Bioarchaeology, Biological mechanism, Genome, Evolutionary genetics, Behavior, Ecology, Comparative cognition, Primates, Growth and aging, etc.
45060	Applied anthropology-related
	Physiological anthropology, Ergonomics, Forensic anthropology, Medical anthropology, Physiological polymorphisms, Environmental adaptability, Somatic and physiological function, Anthropometry and bioengineering, Lifestyle, etc.

Medium-sized Section 46 : Neuroscience and related fields

Basic Section	Examples of related research content
46010	Neuroscience-general-related
	Neurochemistry, Neuron, Glia, Genome, Epigenetics, Neurobiology, Information processing, Synapse, Neurogenesis, etc.
46020	Anatomy and histopathology of nervous system-related
	Neural development, Anatomy of nervous system, Neural network structure, Neuropathology, etc.
46030	Function of nervous system-related
	Neurophysiology, Neuropharmacology, Neurotransmission, Neuroinformatics, Behavioral neuroscience, Neural system physiology, Cerebral blood flow, Autonomic nervous system, etc.

Broad Section H

Medium-sized Section 47 : Pharmaceutical sciences and related fields

Basic Section	Examples of related research content
47010	Pharmaceutical chemistry and drug development sciences-related
	Inorganic chemistry, Organic chemistry, Medicinal chemistry, Medicinal molecular design, Drug discovery, Bio-related materials, Chemical biology, etc.
47020	Pharmaceutical analytical chemistry and physicochemistry-related
	Environmental analysis, Bioanalysis, Physicochemistry, Biophysics, Structural biology, Radiochemistry, Bioimaging, Drug formulation design, Computer science, Information science, etc.
47030	Pharmaceutical hygiene and biochemistry-related
	Environmental hygiene, Healthful nutrition, Disease prevention, Toxicology, Drug metabolism, Host defense, Molecular biology, Cell biology, Biochemistry, etc.
47040	Pharmacology-related
	Pharmacology, Pharmacogenomics, Applied pharmacology, Signal transduction, Drug interactions, Drug response, Pharmacotherapy, Pharmacotoxicology, etc.
47050	Environmental and natural pharmaceutical resources-related
	Environmental resource science, Natural products chemistry, Bioactive natural compounds, Medicinal resources, Medicinal foods, Pharmaceutical microbiology, etc.
47060	Clinical pharmacy-related
	Pharmacokinetics, Medical informatics, Social pharmacy, Clinical pharmacy, Pharmaceutics, Regulatory science, Education for the pharmacist, etc.

(Broad Section H)

Medium-sized Section 48 : Biomedical structure and function and related fields

Basic Section	Examples of related research content
48010	Anatomy-related Macroscopic anatomy, Histology, Embryology, etc.
48020	Physiology-related General physiology, Pathophysiology, Comparative physiology, Environmental physiology, etc.
48030	Pharmacology-related Genomic pharmacology, Molecular and cellular pharmacology, Pathological pharmacology, Behavioral pharmacology, Pharmacology for drug discovery, Clinical pharmacology, etc.
48040	Medical biochemistry-related Biofunctional molecular and medical biochemistry, Genome medical sciences, Human genetics, Disease model, etc.

Medium-sized Section 49 : Pathology, infection/immunology, and related fields

Basic Section	Examples of related research content
49010	Pathological biochemistry-related Molecular pathology, Metabolic disorders, Molecular diagnosis, etc.
49020	Human pathology-related Molecular pathology, Cyto- and histo-pathology, Diagnostic pathology, etc.
49030	Experimental pathology-related Disease models, Pathological regulation, Tissue regeneration, etc.
49040	Parasitology-related Parasite, Vector organism, Parasite pathogenicity, Epidemiology of parasites, Control of parasite infections, etc.
49050	Bacteriology-related Bacterium, Fungus, Antimicrobial resistance, Bacterial pathogenicity, Epidemiology of bacteria, Control of bacterial infections, etc.
49060	Virology-related Virus, Prion, Viral pathogenicity, Epidemiology of viruses, Control of viral infections, etc.
49070	Immunology-related Immune system, Immune response, Inflammation, Immune-related disorder, Immune regulation, etc.

Broad Section I

Medium-sized Section 50 : Oncology and related fields

Basic Section	Examples of related research content
50010	Tumor biology-related Cancer and gene, Tumor development, Invasion, Metastasis, Cancer microenvironment, Cancer and signal transduction, Characteristics of cancer cells, Cancer and immune cells, etc.
50020	Tumor diagnostics and therapeutics-related Genome analysis, Diagnostic markers, Molecule imaging, Chemotherapy, Nucleic acid therapy, Gene therapy, Immunotherapy, Molecular targeted therapy, Physical therapy, Radiation therapy, etc.

(Broad Section I)

Medium-sized Section 51 : Brain sciences and related fields

Basic Section	Examples of related research content
51010	Basic brain sciences-related Brain-machine interface, Model animal, Computational brain science, Brain information decoding, Control technologies, Brain imaging, Brain biometrics, etc.
51020	Cognitive and brain science-related Social behavior, Communication, Emotion, Decision making, Consciousness, Learning, Neuroeconomics, Neuropsychology, etc.
51030	Pathophysiologic neuroscience-related Clinical neuroscience, Dolorology, Sensory impairment, Movement disorder, Neurological disorder, Neurogenesis, Neuroimmunology, Cellular degeneration, Disease model, etc.

Medium-sized Section 52 : General internal medicine and related fields

Basic Section	Examples of related research content
52010	General internal medicine-related Psychosomatic medicine, Laboratory medicine, General practice, Geriatrics, Psychosomatic internal medicine, Oriental medicine, Palliative medicine, etc.
52020	Neurology-related Neurology, Neurofunctional imaging, etc.
52030	Psychiatry-related Clinical psychiatry, Biological psychiatry, Forensic mental health, etc.
52040	Radiological sciences-related Diagnostic radiology, Therapeutic radiology, Radiation biology, Radiological technology, etc.
52050	Embryonic medicine and pediatrics-related Fetal medicine, Neonatal medicine, Pediatrics, etc.

Medium-sized Section 53 : Organ-based internal medicine and related fields

Basic Section	Examples of related research content
53010	Gastroenterology-related Upper digestive tract, Lower digestive tract, Liver, Biliary tract, Pancreas, etc.
53020	Cardiology-related Ischemic heart disease, Valvular heart disease, Arrhythmia, Cardiomyopathy, Heart failure, Peripheral arterial disease, Arteriosclerosis, Hypertension, etc.
53030	Respiratory medicine-related Respiratory medicine, Asthma, Diffusive lung disease, COPD, Lung cancer, Pulmonary hypertension, etc.
53040	Nephrology-related Acute renal failure, Chronic kidney disease, Diabetic nephropathy, Hypertension, Aqueous electrolyte metabolism, Artificial dialysis, etc.
53050	Dermatology-related Dermatology, Cutaneous immune disease, Cutaneous infection, Cutaneous tumor, etc.

(Broad Section I)

Medium-sized Section 54 : Internal medicine of the bio-information integration and related fields

Basic Section	Examples of related research content
54010	Hematology and medical oncology-related Hematological oncology, Medical oncology, Hematological immunology, Anemia, Thrombosis and hemostasis, Chemotherapy, etc.
54020	Connective tissue disease and allergy-related Connective tissue disease, Allergy, Clinical immunology, Inflammation, etc.
54030	Infectious disease medicine-related Infection diagnostics, Infection therapeutics, Host defense, International infection science, etc.
54040	Metabolism and endocrinology-related Energy balance, Glucose metabolism, Lipid metabolism, Purine metabolism, Bone metabolism, Electrolyte balance, Endocrinology, Neuroendocrinology, Reproductive endocrinology, etc.

Medium-sized Section 55 : Surgery of the organs maintaining homeostasis and related fields

Basic Section	Examples of related research content
55010	General surgery and pediatric surgery-related Surgical basic principles, Breast surgery, Endocrine surgery, Pediatric surgery, Transplant surgery, Artificial organs science, Regeneration, Operation support, etc.
55020	Digestive surgery-related Upper gastrointestinal surgery, Lower gastrointestinal surgery, Hepatic surgery, Biliary surgery, Pancreatic surgery, etc.
55030	Cardiovascular surgery-related Coronary artery surgery, Heart valve surgery, Surgery for myocardial disease, Aortic surgery, Vascular surgery, Congenital heart surgery, etc.
55040	Respiratory surgery-related Lung surgery, Mediastinal surgery, Chest wall surgery, Respiratory tract surgery, etc.
55050	Anesthesiology-related Anesthesiology, Perioperative management, Pain management, Resuscitology, Palliative medicine, etc.
55060	Emergency medicine-related Intensive care medicine, Emergency resuscitation science, Trauma surgery, Disaster medicine, Disaster medical care, etc.

Medium-sized Section 56 : Surgery related to the biological and sensory functions and related fields

Basic Section	Examples of related research content
56010	Neurosurgery-related Neurosurgery, Spine and spinal cord diseases, etc.
56020	Orthopedics-related Orthopedics, Rehabilitation medicine, Sports medicine, etc.
56030	Urology-related Urology, Male genitalia science, etc.
56040	Obstetrics and gynecology-related Obstetrics, Reproductive endocrinology, Gynecologic oncology, Female health care medicine, etc.

(Broad Section I)

56050	Otorhinolaryngology-related
	Otorhinolaryngology, Head and neck surgery, etc.
56060	Ophthalmology-related
	Ophthalmology, Ophthalmological optics, etc.
56070	Plastic and reconstructive surgery-related
	Plastic surgery, Reconstructive surgery, Aesthetic plastic surgery, etc.

Medium-sized Section 57: Oral science and related fields

Basic Section	Examples of related research content
57010	Oral biological science-related
	Oral anatomy, Oral histology and embryology, Oral physiology, Oral biochemistry, Pharmacology for hard tissues, etc.
57020	Oral pathobiological science-related
	Oral infectious diseases, Oral pathology, Oral experimental oncology, Immunity and inflammation, Laboratory medicine, etc.
57030	Conservative dentistry-related
	Operative dentistry, Endodontology, Periodontology, etc.
57040	Regenerative dentistry and dental engineering-related
	Regenerative dentistry, Biomaterial science, Dental materials science, Oral and maxillofacial prosthetics, Oral implantology, etc.
57050	Prosthodontics-related
	Prosthodontics, Oral rehabilitation, Gerodontology, etc.
57060	Surgical dentistry-related
	Oral and maxillofacial surgery, Oral maxillofacial reconstructive surgery, Dental anesthesiology, Psychosomatic medicine dentistry, Dental radiology, etc.
57070	Developmental dentistry-related
	Orthodontics, Pediatric dentistry, etc.
57080	Social dentistry-related
	Dental hygiene, Preventive dentistry, Oral health administration and management, Dental education, Forensic odontology, etc.

Medium-sized Section 58: Society medicine, nursing, and related fields

Basic Section	Examples of related research content
58010	Medical management and medical sociology-related
	Medical management, Medical social science, Ethics for medical science, Ethics for medical care, Biomedical education, History of medical science, Health policy and economics, Clinical trials, Health and medical services administration, Disaster medical science, etc.
58020	Hygiene and public health-related: including laboratory approach
	Hygiene, Public health, Epidemiology, Global health, etc.
58030	Hygiene and public health-related: excluding laboratory approach
	Hygiene, Public health, Epidemiology, Global health, etc.
58040	Forensics medicine-related
	Forensic medicine, Forensic pathology, Forensic toxicology, Forensic genetics, Suicide, Abuse, Clinical forensic medicine, Sudden death, etc.

(Broad Section I)

58050	Fundamental of nursing-related
	Fundamental of nursing, Nursing education, Nursing administration, Nursing ethics, Global nursing, etc.
58060	Clinical nursing-related
	Critical care and emergency nursing, Perioperative nursing, Nursing of chronic illness, Oncology nursing, Psychiatric nursing, Palliative care nursing, etc.
58070	Lifelong developmental nursing-related
	Women's health nursing, Maternal nursing, Midwifery, Family health nursing, Child health nursing, School nursing, etc.
58080	Gerontological nursing and community health nursing-related
	Gerontological nursing, Community health nursing, Public health nursing, Disaster nursing, Home care nursing, etc.

Medium-sized Section 59 : Sports sciences, physical education, health sciences, and related fields

Basic Section	Examples of related research content
59010	Rehabilitation science-related
	Rehabilitation medicine, Rehabilitation nursing, Rehabilitation medical care, Physicotherapeutics, Occupational therapy, Assistive technology, Speech and language therapy, etc.
59020	Sports sciences-related
	Sports physiology, Sports biochemistry, Sports medicine, Sports sociology, Sports management, Sports psychology, Sports education, Training science, Sports biomechanics, Adapted sports science, etc.
59030	Physical education, and physical and health education-related
	Growth developmental science, Physical and health education, Physical education in school, Educational physiology, Physical systems science, Higher brain function science, Martial arts theory, Outdoor education, etc.
59040	Nutrition science and health science-related
	Nutritional physiology, Nutritional biochemistry, Nutritional education, Clinical nutrition, Functional food, Lifestyle-related disease, Health promotion, Aging, etc.

Medium-sized Section 90 : Biomedical engineering and related fields

Basic Section	Examples of related research content
90110	Biomedical engineering-related
	Medical imaging, Medical modeling, Biological simulation, Biometrics, Artificial organs, Tissue engineering, Biophysical properties, Biocontrol, Biomechanics, Nanobio systems, etc.
90120	Biomaterials-related
	Biofunctional materials, Tissue engineering materials, Biocompatible materials, Nanobio materials, Drug delivery systems, Stimuli-sensitive materials, Genetic engineering material, etc.
90130	Medical systems-related
	Medical ultrasound system, Diagnostic imaging system, Laboratory diagnosis systems, Minimally invasive treatment systems, Remote diagnosis and treatment systems, Organ preservation systems, Medical information systems, Computer-assisted surgery, Medical robot, etc.
90140	Medical technology assessment-related
	Regulatory science, Safety evaluation, Clinical study, Medical technology ethics, Medical devices, etc.
90150	Medical assistive technology-related
	Healthcare and rehabilitation engineering, Life assist technology, Care support technology, Accessibility design, Universal design, Rehabilitation and nursing robot, Assist device for artificial internal organ, Rehabilitation devices, Nursing science and engineering, etc.

Broad Section J

Medium-sized Section 60 : Information science, computer engineering, and related fields

Basic Section	Examples of related research content
60010	Theory of informatics-related Discrete structure, Mathematical logic, Theory of computation, Mathematical theory of programs, Computational complexity theory, Algorithm theory, Information theory, Coding theory, Theory of cryptography, Learning theory, etc.
60020	Mathematical informatics-related Optimization theory, Mathematical systems theory, System control theory, System analysis, System methodology, System modeling, System simulation, Combinatorial optimization, Queueing theory, Mathematical finance, etc.
60030	Statistical science-related Statistics, Data science, Modeling, Statistical inference, Multivariate analysis, Time series analysis, Statistical quality control, Applied statistics, etc.
60040	Computer system-related Computer architecture, Circuit and system, LSI design, LSI testing, Reconfigurable system, Dependable architecture, Low power technology, Hardware/software codesign, Embedded system, etc.
60050	Software-related Programming language, Programming methodology, Operating system, Parallel and distributed computing, Software engineering, Virtualization technology, Cloud computing, Software dependability, Software security, etc.
60060	Information network-related Network architecture, Network protocol, Internet, Mobile network, Pervasive computing, Sensor network, IoT, Traffic engineering, Network management, Service platform technology, etc.
60070	Information security-related Cryptography, Tamper resistance technology, Authentication, Biometrics, Access control, Malware countermeasure, Countermeasures against cyber attacks, Privacy protection, Digital forensics, Security evaluation and authorization, etc.
60080	Database-related Data model, Database system, Multimedia database, Information retrieval, Content management, Metadata, Big data, Geographic information system, etc.
60090	High performance computing-related Parallel processing, Distributed processing, Cloud computing, Numerical analysis, Visualization, Computer graphics, High performance computing application, etc.
60100	Computational science-related Mathematical engineering, Computational mechanics, Numerical simulation, Multi-scale modeling, Large-scale computing, Massively parallel computing, Numerical computing methods, Advanced algorithms, etc.

Medium-sized Section 61 : Human informatics and related fields

Basic Section	Examples of related research content
61010	Perceptual information processing-related Pattern recognition, Image processing, Computer vision, Visual media processing, Acoustic media processing, Media editing, Media database, Sensing, Sensor fusion, etc.
61020	Human interface and interaction-related Human interface, Multi-modal interface, Human-computer interaction, Computer supported cooperative work, Virtual reality, Augmented reality, Realistic communication, Wearable device, Usability, Ergonomics, etc.
61030	Intelligent informatics-related Search, Inference, Machine learning, Knowledge acquisition, Intelligent system, Intelligent information processing, Natural language processing, Data mining, Ontology, Agent system, etc.
61040	Soft computing-related Neural network, Evolutionary computation, Fuzzy theory, Chaos, Complex systems, Probabilistic information processing, etc.
61050	Intelligent robotics-related Intelligent robot, Behavior and environment recognition, Planning, Sensory behavior system, Autonomous system, Digital human, Real world information processing, Physical agents, Intelligent space, etc.

(Broad Section J)

61060	Kansei informatics-related
	Kansei design, Kansei cognitive science, Kansei psychology, Kansei robotics, Kansei measurement evaluation, Kansei interface, Kansei physiology, Kansei material science, Kansei pedagogy, Kansei brain science, etc.
90010	Design-related
	Information design, Environmental design, Industrial design, Spatial design, Design history, Theory of design, Design standard, Design support, Evaluation of design, Design education, etc.
90030	Cognitive science-related
	Cognitive science in general, Cognitive models, Kansei, Human factors, Cognitive and brain science, Comparative cognition, Cognitive linguistics, Cognitive engineering, etc.

Medium-sized Section 62 : Applied informatics and related fields

Basic Section	Examples of related research content
62010	Life, health and medical informatics-related
	Bioinformatics, Life informatics, Biological information, Neuroinformatics, Neural information processing, Molecular computing, DNA computing, Medical information, Health information, Medical image, etc.
62020	Web informatics and service informatics-related
	Web system, Semantic web, Web mining, Social network analysis, Service engineering, Educational service, Medical service, Welfare service, Social service, Information culture, etc.
62030	Learning support system-related
	Media literacy, Learning media, Social media, Learning content, Learning management, Learning support, Remote learning, e-Learning, etc.
62040	Entertainment and game informatics-related
	Music information processing, 3D content, Animation, Game programming, Network entertainment, Media art, Digital museum, Experience design, etc.
90020	Library and information science, humanistic and social informatics-related
	Library science, Information services, Information organizing, Information retrieval, Bibliometrics, Information resources, Information ethics, Digital humanities, Social Informatics, Digital archives, etc.

Broad Section K

Medium-sized Section 63 : Environmental analyses and evaluation and related fields

Basic Section	Examples of related research content
63010	Environmental dynamic analysis-related
	Global warming, Environmental change, Water and material cycle, Ocean, Land, Polar regions, Environmental measurements, Environmental model, Environmental information, Remote sensing, etc.
63020	Radiation influence-related
	Radiation, Measurement, Control, Repair, Biological effects, Risk, etc.
63030	Chemical substance influence on environment-related
	Toxicology, Toxic substance to human, Trace chemical substance, Endocrine disruptor, Repair, etc.
63040	Environmental impact assessment-related
	Atmosphere, Hydrosphere, Terrestrial impact, Impact assessment on human health, Social and economic impacts, Impact assessment on the future generation, Environmental impact assessment, Assessment methods, Monitoring, Simulation, etc.

Medium-sized Section 64 : Environmental conservation measure and related fields

Basic Section	Examples of related research content
64010	Environmental load and risk assessment-related
	Environmental analysis, Environmental load analysis, Environmental monitoring, Pollution dynamics assessment, Evaluation of radioactive substances dynamics, Environmental modeling, Exposure assessment, Toxicity evaluation, Environmental assessment, Chemical substance management, etc.

(Broad Section K)		64020	Environmental load reduction and remediation-related
			Removal of contamination, Treatment of waste material, Control of contamination source, Disposal of waste material, Environmental load reduction, Remediation measure of contamination, Noise and vibration reduction, Countermeasure of ground settlement, Bioremediation, Radioactive decontamination, etc.
		64030	Environmental materials and recycle technology-related
			Recycle materials, Valuable materials recovery, Separation, refining and purification, Environment-conscious design, Recycle chemistry, Green production, Zero emission, Resource circulation, Renewable energy, Biomass utilization, etc.
		64040	Social-ecological systems-related
			Biodiversity, Conservation biology, Natural capital, Impact of climate change, Impact analysis on ecosystem, Ecosystem management, Ecosystem restoration, Ecosystem services, Natural tourism resources, Regional environmental planning, etc.
		64050	Sound material-cycle social systems-related
			Sound material-cycle systems, Material and energy budget analysis, Low carbon society, Unused energy, Regional revitalization, Water use system, Industrial symbiosis, Life cycle assessment (LCA), Integrated environmental management, 3R (reduction, reuse, recycle) social systems, etc.
		64060	Environmental policy and social systems-related
			Environmental philosophy and ethics, Environmental laws, Environmental economics, Environmental information, Environmental education, Environmental activities, Environmental management and governance, Social and public system, Consensus forming, Sustainable development, etc.

Attached Table 3

Sections that are subject to joint review in Scientific Research (B)

Basic Section	Examples of related research content
01010	Philosophy and ethics-related
	Philosophy in general, Ethics in general, Western philosophy, Western ethics, Japanese philosophy, Japanese ethics, Applied ethics, etc.
01080	Sociology of science, history of science and technology-related
	Sociology of science, History of science, History of technology, History of medicine, Industrial archeology, Philosophy of science, Foundation of science, STS (Science, technology and society), etc.

Basic Section	Examples of related research content
01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related
	Chinese philosophy/thought, Indian philosophy/thought, Buddhist philosophy, Bibliography, Philology, etc.
01030	Religious studies-related
	History of religions, Philosophy of religion, Theology, Sociology of religion, Psychology of religion, Anthropology of religion,Studies of religious folklore, Mythology, Bibliography, Philology, etc.
01040	History of thought-related
	History of thought in general, History of Western thought, History of Eastern thought, History of Japanese thought, History of Islamic thought, etc.

Basic Section	Examples of related research content
02010	Japanese literature-related
	Japanese literature in general, Ancient literature, Medieval literature, Chinese classics in Japan, Bibliography, Philology, Premodern literature, Modern literature, Contemporary literature, Literary theory, etc.
02020	Chinese literature-related
	Chinese literature, Bibliography, Philology, Literary theory, etc.

Basic Section	Examples of related research content
02030	English literature and literature in the English language-related
	English literature, American literature, Literature in the English language, Literary theory, Bibliography, Philology, etc.
02040	European literature-related
	French literature, Literature in the French language, German literature, Literature in the German language, Classics, Russian and East European literature, Literature in other European languages, Literary theory, Bibliography, Philology, etc.

Basic Section	Examples of related research content
02060	Linguistics-related
	Phonetics/phonology, Semantics/pragmatics, Morphosyntax, Sociolinguistics, Contrastive linguistics, Psycholinguistics, Neurolinguistics, Historical linguistics, Corpus linguistics, Endangered and minority languages, etc.
02080	English linguistics-related
	Phonetics/phonology, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Sociolinguistics, Diversity of the English language, Corpus linguistics, History of the English language, History of English linguistics, etc.

Basic Section	Examples of related research content
02070	Japanese linguistics-related
	Phonetics/phonology, Writing systems, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Language life, Dialect, History of the Japanese language, History of Japanese linguistics, etc.
02090	Japanese language education-related
	Research on learners, Language acquisition, Teaching material, Curriculum evaluation, Japanese language education for specific purposes, Bilingual education, Research on teachers, Japanese language for Japanese language education, History of Japanese language education, Cross-cultural understanding, etc.

Basic Section	Examples of related research content
03060	Cultural assets study-related
	Dating methods, Material analysis, Production techniques, Conservation science, Archaeological prospection, Plant and animal residues, Human remains, Cultural heritage, Cultural property policy, Restoration of cultural properties, etc.
03070	Museology-related
	Museum displays and exhibitions, Museum management, Museum collections and documentation, Museum conservation and preservation, Museum education and learning, Museum informatics and media studies, Museum finance and administration, History of museums and museology, etc.

Basic Section	Examples of related research content
05010	Legal theory and history-related
	Legal philosophy, Roman law, Legal history, Sociology of law, Comparative law, Foreign law, Law and policy, Law and economics, Judicial system, etc.
05030	International law-related
	Public international law, Private international law, International human rights law, International economic law, EU law, etc.

Basic Section	Examples of related research content
05040	Social law-related
	Labor law, Economic law, Social security law, Education law, etc.
05060	Civil law-related
	Civil law, Commercial law, Civil procedure, Insolvency law, Alternative dispute resolution, etc.

Basic Section	Examples of related research content
07010	Economic theory-related
	Microeconomics, Macroeconomics, Game theory, Behavioral economics, Experimental economics, Economic theory, Evolutionary economics, Economic institutions, Economic systems, etc.
07020	Economic doctrines and economic thought-related
	Economic doctrines, Economic thought, Social thought, Economic philosophy, etc.

Basic Section	Examples of related research content
07030	Economic statistics-related
	Statistical system, Statistical research, Economic statistics, Big data, Econometrics, Financial econometrics, etc.
07060	Money and finance-related
	Monetary economics, Finance, International finance, Corporate finance, Financial engineering, Insurance, etc.

Basic Section	Examples of related research content
80030	Gender studies-related
	Gender studies in general, Feminism, Men's studies, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.
08010	Sociology-related
	Sociology in general, Community, Family, Labor, Stratification, Culture, Media, Ethnicity, Social movements, Social research, etc.

Basic Section	Examples of related research content
12030	Basic mathematics-related
	Mathematical logic and foundations, Information theory, Discrete mathematics, Computer mathematics, History of mathematics, etc.
12040	Applied mathematics and statistics-related
	Numerical analysis, Mathematical modelling, Optimal control, Game theory, Statistical mathematics, etc.

Basic Section	Examples of related research content
18030	Design engineering-related
	Mechanical design, Product design, Design theory, Design for reliability, Optimal design, Computer-aided design, etc.
18040	Machine elements and tribology-related
	Machine elements, Mechanisms, Tribology, Actuators, Micromachines, etc.

Basic Section	Examples of related research content
39060	Conservation of biological resources-related
	Conservation biology, Biodiversity conservation, Conservation of phylogenetic diversity, Genetic resources conservation, Ecosystem conservation, Conservation of microorganisms, Impacts of non-native species, etc.
39070	Landscape science-related
	Landscape architecture, Parks and open space planning, Landscape planning, Cultural landscape, Nature conservation, Landscape ecology, Parks and open space management, Parks, Environmental greening, Participatory community design, etc.

Basic Section	Examples of related research content
45010	Genetics-related
	Molecular genetics, Cellular genetics, Developmental genetics, Behavioral genetics, Population genetics, Quantitative trait, Population genomics, Genome-wide association study, Genetic diversity, Epigenome diversity, etc.
45020	Evolutionary biology-related
	Molecular evolution, Evolutionary genetics, Phenotypic evolution, Evolutionary developmental biology, Evolution of ecological traits, Evolution of behaviors, Experimental evolution, Coevolution, Speciation, Evolutionary theory, etc.

Basic Section	Examples of related research content
45050	Physical anthropology-related
	Morphology and function, Bioarchaeology, Biological mechanism, Genome, Evolutionary genetics, Behavior, Ecology, Comparative cognition, Primates, Growth and aging, etc.
45060	Applied anthropology-related
	Physiological anthropology, Ergonomics, Forensic anthropology, Medical anthropology, Physiological polymorphisms, Environmental adaptability, Somatic and physiological function, Anthropometry and bioengineering, Lifestyle, etc.

Basic Section	Examples of related research content
47010	Pharmaceutical chemistry and drug development sciences-related
	Inorganic chemistry, Organic chemistry, Medicinal chemistry, Medicinal molecular design, Drug discovery, Bio-related materials, Chemical biology, etc.
47050	Environmental and natural pharmaceutical resources-related
	Environmental resource science, Natural products chemistry, Bioactive natural compounds, Medicinal resources, Medicinal foods, Pharmaceutical microbiology, etc.

Basic Section	Examples of related research content
60010	Theory of informatics-related
	Discrete structure, Mathematical logic, Theory of computation, Mathematical theory of programs, Computational complexity theory, Algorithm theory, Information theory, Coding theory, Theory of cryptography, Learning theory, etc.
60020	Mathematical informatics-related
	Optimization theory, Mathematical systems theory, System control theory, System analysis, System methodology, System modeling, System simulation, Combinatorial optimization, Queueing theory, Mathematical finance, etc.

Basic Section	Examples of related research content
60030	Statistical science-related
	Statistics, Data science, Modeling, Statistical inference, Multivariate analysis, Time series analysis, Statistical quality control, Applied statistics, etc.
61030	Intelligent informatics-related
	Search, Inference, Machine learning, Knowledge acquisition, Intelligent system, Intelligent information processing, Natural language processing, Data mining, Ontology, Agent system, etc.

Basic Section	Examples of related research content
60040	Computer system-related
	Computer architecture, Circuit and system, LSI design, LSI testing, Reconfigurable system, Dependable architecture, Low power technology, Hardware/software codesign, Embedded system, etc.
60090	High performance computing-related
	Parallel processing, Distributed processing, Cloud computing, Numerical analysis, Visualization, Computer graphics, High performance computing application, etc.

Basic Section	Examples of related research content
60080	Database-related
	Data model, Database system, Multimedia database, Information retrieval, Content management, Metadata, Big data, Geographic information system, etc.
62020	Web informatics and service informatics-related
	Web system, Semantic web, Web mining, Social network analysis, Service engineering, Educational service, Medical service, Welfare service, Social service, Information culture, etc.

Basic Section	Examples of related research content
61020	Human interface and interaction-related
	Human interface, Multi-modal interface, Human-computer interaction, Computer supported cooperative work, Virtual reality, Augmented reality, Realistic communication, Wearable device, Usability, Ergonomics, etc.
62040	Entertainment and game informatics-related
	Music information processing, 3D content, Animation, Game programming, Network entertainment, Media art, Digital museum, Experience design, etc.

Basic Section	Examples of related research content
90130	Medical systems-related
	Medical ultrasound system, Diagnostic imaging system, Laboratory diagnosis systems, Minimally invasive treatment systems, Remote diagnosis and treatment systems, Organ preservation systems, Medical information systems, Computer-assisted surgery, Medical robot, etc.
90140	Medical technology assessment-related
	Regulatory science, Safety evaluation, Clinical study, Medical technology ethics, Medical devices, etc.

(**Reference 1)**
Procedures on the Handling of Grants-in-Aid for Scientific Research (Omitted)

(Reference 2)
Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (Omitted)

(Reference 3)
Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (Omitted)

Inquiries

1. Inquiries about the invitation of applications should be directed to the following divisions through the research institution.

(1) For inquiries concerning the invitation of applications

・ **General inquiries about the Application Procedures**
Research Aid Planning Division, Research Program Department, Japan Society for the Promotion of Science (JSPS)
Telephone: 03-3263-4796

・ **Specially Promoted Research and Scientific research(S)**
Research Aid Division II, Research Program Department, JSPS
Telephone: 03-3263-4254 (Specially Promoted Research)
03-3263-4388 (Scientific Research (S))

・ **Scientific research (A/B/C) , Early-Career Scientists and Challenging Research (Pioneering/Exploratory)**
Research Aid Division I, Research Program Department, JSPS
Telephone: 03-3263-4724, 1003, 0996, 4758 (Scientific research (A/B/C), Early-Career Scientists)
Telephone: 03-3263-0977 (Challenging Research (Pioneering/Exploratory))

* Available every day except on Saturdays, Sundays, National Holidays, the New Year Holidays (from December 29 until January 3), and the Anniversary of the Foundation of JSPS (September 21).

(2) For inquiries concerning the use of the KAKENHI Electronic Application System

・ **Call Center**
Telephone: 0120-556-739 (toll-free)
* Available from 9:30 to 17:30 every day except Saturdays, Sundays, National Holidays and the New Year Holidays (from December 29 until January 3)

(3) For inquiries concerning the use of the Cross-ministerial Research and Development Management System (e-Rad)

・ **e-Rad Help Desk**
Telephone: 0570-057-060 (Navi Dial)
* Available from 9:00 to 18:00 except on Saturdays, Sundays, National Holidays and the New Year Holidays (from December 29 until January 3)
* The following phone number is also available. 03-6631-0622

< Important points >

① How to operate e-Rad
Manuals on how to operate e-Rad can be referred or downloaded from the portal site (URL: https://www.e-rad.go.jp). Please agree to the terms of service and apply.

② Time period when e-Rad is available
Monday to Sunday, 00:00 - 24:00 (in operation 24 hours a day, 365 days a year)
However even during the above-mentioned time period, the operation of e-Rad may be disrupted or suspended, when maintenance and inspection is being carried out. If the operation is scheduled to be disrupted or suspended, this will be announced beforehand on the portal site.

(4) For matters related to the "Self-Assessment Checklist on the Improvement of the System" based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)"

Office of Competitive Research Funding Administration, Research Environment Division, Science and Technology Policy Bureau, MEXT
Telephone: 03-5253-4111 (ext. 3866,3827)

(5) For matters related to the "Checklist Pertaining to the Current Status" based on the "Guidelines for Responding to Misconduct in Research"

Office for Research Integrity Promotion, Research Environment Division, Science and Technology Policy Bureau, MEXT
Telephone: 03-6734-3874

(6) For matters related to use of support by Platform formed by "Foundation of Scientific Research Support"

Grants-in-Aid for Scientific Research Team I and II, Scientific Research Aid Division, Research Promotion Bureau, MEXT
Telephone: 03-6734-4087

(7) For matters related to the "National Bioscience Database"

National Bioscience Database Center, Japan Science and Technology Agency (JST)
Telephone: 03-5214-8491

(8) For matters related to the "Inter-University Bio-Backup Project"

Executive Office, IBBP Center, Inter-University Research Institute Corporation National Institutes of Natural Sciences
Telephone: 0564-59-5930, 5931

(9) For matters related to the "National BioResource Project"

National BioResource Project (NBRP) Executive Office
(established in the Research Organization for Information and Systems, National Institute of Genetics)
Telephone: 055-981-6809

(10) For matters related to the "researchmap"

Service Support Center (in charge of the researchmap), Department of Information Infrastructure, National Institute of Advanced Industrial Science and Technology (JST)
Web inquiry form: https://researchmap.jp/public/inquiry/

(11) For matters related to the "Security Export Control Policy"

Security Export Control Administration Division, Trade Control Department, Trade and Economic Cooperation Bureau, Ministry of Economy, Trade and Industry
Telephone: 03-3501-2800
FAX: 03-3501-0996

2. Application forms can be downloaded from the following website.

JSPS's website on Grants-in-Aid for Scientific Research
URL：https://www.jsps.go.jp/j-grantsinaid/index.html [Japanese]
URL：https://www.jsps.go.jp/english/e-grants/index.html [English]