

FY2024

Instructions for Preparing a Proposal of Strategic Basic Research Programs : CREST

As for “Overview”, and “Research Supervisor’s Policy on Call for Application, Selection, and Management” and “Strategic Objective” of the research area to be applied for, please see the following URL and select the research area.: <https://www.jst.go.jp/kisoken/boshuu/teian/en/top/ryoiki.html>.

For a research director (PI) and lead joint researcher(s) (Co-PIs), researcher IDs for e-Rad must be required in order to submit a proposal. Ensure that you have deleted “Proposal Preparation Checklist” before submitting proposal documents.

- (note 1) Those applicants should not use the proposal format speculated in this instruction, who make a Japan-France joint proposal in cooperation with Agence Nationale de la Recherche (ANR) in three areas of the CREST research: “Fundamental Technology for Semiconductor-Device Structures Using Nanomaterials”, supervised by Prof. Riichiro Saito. The applicants are requested to submit the summary of the joint research to JST via e-Rad, as well as the joint research proposal written in English that has been submitted to ANR, France,
- (note 2) If there is a defect in a proposal document uploaded to e-Rad that makes it difficult to review the proposal, the proposal will not be accepted. Please be attentive to the preparation of documents. “Defects that make a review difficult” refers to missing documents (especially, form 1: cover of proposal documents), garbled characters that make a review difficult, and the absence of important entry items in a proposal. JST shall not be held responsible for any defects in proposal documents that appear before a deadline for proposal applications, whether or not the proposal is accepted. Therefore, please be aware that JST makes neither an amendment of the proposal upon prior confirmation by the applicant, nor a request for the applicant to correct proposal documents before a deadline of submission. JST also prohibits the withdrawal of proposals on e-Rad after the deadline and will not accept any proposal that was withdrawn, whatever the reason may be.
- (note 3) For the items that are included in both e-Rad and a proposal document, if the descriptions are not same, the information in the proposal document takes precedence.

Research Proposal (Form) Completion Requirements

A list of documentation to submit is provided below. Prepare research proposals by following the research proposal completion requirements on the next page and the following pages.

Please use the Research Proposal Form of FY2024. Some research areas require that the original proposal forms be used, or other conditions (research term or research budget) may be different. Please ensure that you download and use the proposal form of the research area to which you are planning to apply.

When you prepare a proposal, you are requested to refer to the “Research Supervisor’s Policy on Call for Application, Selection, and Management” of the research area.

Form No.	Document
Form 1	Cover of research proposal documents (within one page)
Form 2	Research Proposal Overview (within one page)
Form 3-1	Project Description (within six pages)
Form 3-2	Project Organization and Research schedule (within two pages)
Form 4-1	Research Project Organization 1 (within two pages)
Form 4-2	Research Project Organization 2 (within two pages for each group)
Form 5	Research Budget
Form 6	Research Achievements (PI) (within three pages)
Form 7	Research Achievements (Co-PIs) (within two pages per person)
Form 8	Information on Other Supports
Form 9	Other Special Remarks (within four pages)

- ※ File sizes should not exceed 3MB in total.
- ※ See also the user manual of e-Rad: https://www.e-rad.go.jp/en/manual/for_researcher.html
- ※ Researchers must understand Application Guideline “Chapter 8: Key Points in Submitting Proposals” and “Chapter 9: Limitations on the Multiple Application within the Strategic Basic Research Programs” before making an application.

FY 2024 Application CREST Research Proposal

- ※ Fill in form 1 within one page of A4 paper (observe strictly).
- ※ You may delete notes in blue characters in this and other forms. When information entered in e-Rad is different from that in research proposal documents, the latter will be considered correct.

Research Area	Select one of the CREST Research Area among the calling for proposals in 2024.
Title of proposed research project	When the title is in English, describe the title also in Japanese (about 20 characters) along with the English title.
Name of Research Director (PI)	
Affiliated Institution, Section, Title	Describe the affiliation and title accurately without any omission. (i.e., describe Graduate school, Department, Majors, XX laboratory, and project/tenure/associate/assistant professor).
Academic Background	<p>(Entry example)</p> <p>Completed Ph.D. in Graduate School of xxxx University in 20XX (Instructor: Professor xxxx) 【Instructor Name Required】 Doctoral Acquisition (xxxx)</p>
Professional Appointments of Research Director (PI) (Main work history and research contents)	<p>(Entry Example: It is essential to include the director's name of the belonged laboratory.)</p> <p>Assistant Professor, Faculty of xxxx of xxxx University in 20XX to 20XX Research about xxxx in the professor xxxx's laboratory Researcher of xxxx Research Institute from 20XX to 20XX Engaged in xxxx research in the xxxx laboratory of professor xxxx</p> <p>※Please list the period of any life events (childbirth, childcare, and nursing care, etc.) that should be taken into account. (Filling in this information is not required. Please only fill in this information if you wish to notify the evaluator because it had an impact on your prior research results.)</p>
Information of Research Director (PI)	<p>URL:</p> <p>Please indicate URL of researchmap. If not, please indicate the websites where the research achievements of PI is available.</p>
Research Period	[Oct. 2024] – [mm. yy] (xx years)
Total Research Budget	<p>Total Budget: thousand yen</p> <p>(Do not include decimal point. Pay attention to the unit. (check if the expenses exceed the upper limit set for research expenses stipulated in the “Research Supervisor’s Policy on Call for Application, Selection, and Management”. Do not include indirect cost.))</p>

Research Proposal Overview

Outline of Research Project

- ※ In Form 2, Provide an overall description of the research proposal in one A4-size sheet (no exceptions). Use 10.5 point or larger font size (If these instructions are not followed, the research proposal might not be accepted). Unlike form 3-1 (project description), it is not allowed to cite numbers of papers that are shown in the list of achievements (form 6 and form 7).
- ※ Please insert figures and tables (in color, permitted) appropriately to be undertaken clearly.

- Form 2 is an important material for the document screening to be evaluated from the perspectives below:

1. Can the proposal be expected to contribute to fulfilling the purpose of the Research Area? Is it aligned with the goals of the Research Area?

※ Mainly, does the proposal correspond to items a. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline?)

”a-The research proposal contributes to the achievement of a Strategic Objective, and the research proposal is consistent with the research area purpose.”

2. Is it aligned with the goals of the CREST Program?

※ Mainly, does the proposal correspond to the goal noted in b. in “(1) Selection Standards (Preliminary Evaluation Standards)” in Section 5.1.3, “Selection Perspective” of Application Guideline for “Basic research that is unique, highly appreciated internationally, and expected to produce outstanding results that contribute greatly to scientific and technological innovation.”)

Therefore, in this form, provide a brief description that focuses on the details corresponding to Item 1, “Background and Objectives,” of CREST Form 3-1 (Project Description), and provide the minimum explanation (corresponding to Items 2 to 6 of Form 3-1) required to understand your description above.

(The scientific/technical evaluation of the validity and feasibility of the Project Description will be considered mainly with CREST Form 3-1)

- A preliminary selection entailing the document screening for each Research Area may be held from the perspectives of 1) and 2) above.

Project Description

- ※ Clearly state the work to be undertaken. Figures and tables (in color, permitted) may be included if necessary.
- ※ For Form 3-1, do not exceed six A4-size sheets (no exceptions). Use 10.5 point or larger font size (If these instructions are not followed, the research proposal might not be accepted).
- ※ In this form of project description, make effective references to the descriptions of achievements listed in Forms 6 (PI) and 7 (Co-PI) to clarify the relationship between the achievement and the research being proposed by the research project applicant. In making the references, the numbers listed in the forms can be quoted in this form.

- Clearly describe the content that corresponds to the “Application Guidelines” 5.1.3(1) while distinguishing between the three types of the background of the research project (its necessity and importance), the research record, and the research initiative and plan, separately.

“2024 Application Guidelines” 5.1.3(1) Selection Standards (c: Preliminary Evaluation Standards)

-Promising preliminary results have been obtained for pursuing the research project.

-The research proposals are clearly specifying the background of the research project (its necessity and importance) and the research initiative and plan, separately.

-Research budget planning is necessary and sufficient for pursuing the research project.

1. Background and Objective

- Describe scientific & technological needs, societal, economic or industrial needs, including the trends of the related fields to illustrate the importance and necessity of the proposed research project. In accordance with the needs, describe the objectives of the proposed research project.
- Moreover, from a viewpoint of “Science Technology & Innovation”, describe the impact of the proposed research on science & technology. Future social values resulting from the impact on science & technology are described in the “ 6. Future Prospect of Research” in detail.

2. Target of proposed research project

(1) Target to be achieved in the middle of the research period (within 60 words)

Describe briefly (within 60 words) the research target in the middle of the proposed research period (for 5.5 years of entire research period, at the time of 3 years later from the start of the project).

(2) Target to be achieved at the end of the research period (within 60 words)

Describe briefly (within 60 words) the research target at the end of the proposed research project.

3. Research Plans and Approach

- Describe concrete plan of pursuing the proposed research including the approaches to achieve the target and objectives specified in the previous item of this form, for each research group (PI's group, and each Co-PI's group). Show the outline of the time schedule to demonstrate your vision and plan specifically, how to attain "1. Background and Objective", while indicating milestones of research toward "1. Background and Objective." The schedule of the project should be shown in the form 3-2 as well. Also, show clearly the relationship of the project plan with the targets to be achieved after 3 years from the start of proposed research. This is one of the evaluation basis.
- Specify the strategy to acquire and manage intellectual property rights (such as application, authorization, licensing). Describe relevant intellectual property rights that the applicants own.

4. Originality and novelty of the proposed research and comparison to current state of similar studies

- Taking into account the state and trends of research in relevant fields, present originality and novelty of the proposed research project. Describe the advantages of the proposed research over others, specifying the competitive researches overseas.

5. Preparation of fundamental technology

Describe research background and achievements of the PI and other participants that are relevant to implement the proposed research project including the following information;

- Relevant projects conducted in the past and achievements of the PI and those of Co-PIs and other research participants (if necessary).
- Other preliminary knowledge, data, etc. (if any)
- Measures taken to the item "d: Selection Perspective" in "5.1.3 (1) Selection Standards (Preliminary Evaluation Standards)" from application guideline
 - The research project applicant has produced research results for accomplishing the research objectives.
 - An optimal research organization is proposed. The research project applicant will exercise strong leadership and bear responsibility for the entire research team, and, if there will be Co-PIs, they are essential for to the pursuit of pursuing the research project, and a collaboration framework sufficient for enabling significant contributions toward the achievement of research objectives is provided.
 - The research institutions with which the research project applicant and Co-PIs are affiliated have R&D capabilities and other technical foundations in the subject research field.

6. Future Prospect of Research

- Describe expected creation of science, technology & innovation, creation of new industry, acquirement and enforcement of intellectual properties, contribution to society, etc., which are likely realized in the future, by achievement of "1. Background and Objective" in the Project Description. The goal of the research area to be applied for should be also considered.

Project Organization and Research Schedule

※ **For Form 3-2, describe within two or less A4-size sheets (no exceptions).** If this instruction is not followed, the research proposal might not be accepted.

1. Project Organization

Group Name	Name of PI / Co-PI	Affiliation and Title	Research Title (around 12 words)
** Group (* * should be filled with the family name of PI)	Name of the PI	Affiliation and Title of the PI	Title of the proposed project as specified in the form 4-1. *This is also specified in form 4-1.
++ Group (++ should be filled with the family name of Co-PI(1))	Name of the Co-PI (1)	Affiliation and Title of the Co-PI (1)	Name of the research Item of this group in charge *This is also specified in form 4-2.
+++ Group (+++ should be filled with the family name of Co-PI(2))	Name of the Co-PI (2)	Affiliation and Title of the Co-PI (2)	Name of the research Item of this group in charge *This is also specified in form 4-2.

Notes:

- JST, in principle, will enter into a contract research agreement with the organization to which the PI belongs and the ones to which a Co-PIs affiliate for each research theme.
- Research funds will be provided to overseas groups only if the group's participation is necessary to realize the research concept.

2. Research Schedule

- ※ See the example below and enter the schedule of the proposed research project. (The research period described in the following Example is 5.5 year.)
- ※ The name of “PI’s Group”, “Co-PI’s group” should be same as those specified in the previous item of this form respectively.
- ※ If proposed subject consists of several research subthemes, state clearly schedules of each subtheme and the organizations to pursue the subtheme.
- ※ Length, position and thickness of arrows can be changed.

Example

Research Subjects	2024 Fiscal year (6 months)	2025 Fiscal Year	2026 Fiscal Year	2027 Fiscal Year	2028 Fiscal Year	2029 Fiscal Year (12months)
1. XX related Gene Expression Analysis						
• Identification of XX related genes (PI’s Group)	→					
• XX Gene Expression Analysis (Co-PI’s Group 1,2)		→				
2. Development and verification of model animal						
• Development of XX model animal (PI’s Group)	→					
• Verification of XX model animal (Co-PI’s Group 2)			→			
3. Imaging Analysis						
• XX Data Collection (PI’s Group Co-PI’s Group 1)	→					
• Development of XX software (Co-PI’s Group 2)		→				
• Data Analysis (PI’s Group)				→		
4. Development of XX Diagnostic Method						
• Elucidation of XX Correlation (PI’s Group)			→			
• Development of diagnostic method and verification (Co-PI’s Group 1)				→		

Research Project Organization 1

(Research Members of the PI's Group)

- ※ For Form4-1, describe within two or less A4-size sheets (no exceptions). (If this instruction is not followed, the research proposal might not be accepted.)

PI's Group **example**

PI	Affiliation, Department	Title
○○ ○○	Department of ***, Graduate School of ***, ***, University	Professor
Research Participants	Affiliation, Department (Omit if the same as above)	Title
○○ ○○		Professor
○○ ○○		Associate Professor
○○ ○○		Lecturer
×× ××	*** Laboratory, *** Co., Ltd.	Principal Researcher

Notes on describing research groups

- If the proposed research project is selected, but the research organization to pursue the project will be different from the current affiliated organization of PI, provide the name of the institution at which the research will be conducted. Also, provide us with information on the details in the form 9.
- Provide sufficient consideration to the roles played by the members of the research group.
- Add Additional lines for research participants as necessary. If the research staff has not been finalized at the time of the proposal, a note like "X persons for research staff" will suffice.
- If the same research theme needs to be pursued at multiple research organizations, it is possible to add members from the other organizations as research participants. This is only approved on the condition that the affiliated organization of the PI that enters into a contract with JST can manage the research budget. If it is necessary to enter into a contract with JST individually to manage the research budget, the researcher is to be listed in another Co-PI's group (See also the Q&A of "2.2.6(2) Requirements for Organizing a Research Project" of the application guidelines.).

○ Research Subjects and Overview

• Title of Research Theme :

Enter "the name of the proposed project" in form 1 and research theme in form 3-2 "1. Project Organization"

• Research Subjects in Charge :

Enter "the research subtheme" specified in the form 3-2 "2. Research Schedule", of which the PI's group is in charge.

- **Overview of the research :**

Describe briefly an overview of the research subjects that the PI's Group will be in charge of.

- **Role in the entire research project :**

Describe the role which the PI's group plays in realizing the proposed research project. Describe the content that the research institutions with which the research project applicant and Co-PIs are affiliated have R&D capabilities and other technical foundations in the subject research field in "d" of application guideline 5.1.3 (1) Selection Standards (Preliminary Evaluation Standards).

Research Project Organization 2

(Research Members of the Co-PI's Group)

- ※ If a Co-PI's group (Co-PI's institution) other than the PI is required, list them in Form 4-2 (this form) per joint research institution. **This form 4-2 should be described within two or less A4-size sheets (no exceptions) for each Co-PI's group.** (If this instruction is not followed, the research proposal might not be accepted).

Co-PI's Group (1) example

Co-PI	Affiliation, Department	Title
○○ ○○	Department of **, ***University	Professor
Research Participants	Affiliation, Department (Omit if the same as above)	Title
○○ ○○		Principal Researcher
○○ ○○		Researcher
2 researchers to be hired		Research fellow
×× ××	*** Laboratory, *** Co., Ltd.	Principal Researcher

Notes on describing research groups

- If the proposed research project is selected, but the research organization to pursue the project will be different from the current affiliated institution of the Co-PI, provide the name of the organization at which the research will be conducted. Also, provide us with information on the details in the form 9.
- Provide sufficient consideration to the roles played by the members of the research group.
- Add Additional lines for research participants if necessary. If the research staff has not been finalized at the time of the proposal, a note like "X persons for research staff" will suffice.
- If the same research theme needs to be pursued at multiple research organizations, it is possible to add the members from other organizations as research participants. This is only approved on the condition that the affiliated organization of the Co-PI that enters into a contract with JST can manage the research budget. If it is necessary to enter into a contract with JST individually to manage the research budget, the researcher is to be listed in another Co-PI's group (See also the Q&A of "2.2.6(2) Requirements for Organizing a Research Project" of the application guidelines.).

○ Research Subjects and Overview

- **Title of Research Theme of the Co-PI's group :**

Enter "the name of the research theme" of this group specified in form 3-2 "1. Project Organization"

- **Research Subjects in Charge :**

Enter “the research subjects” specified in the form 3-2 “2. Research Schedule”, of which this Co-PI’s group is in charge.

• **Overview of the research :**

Describe briefly an overview of the research subjects that this Co-PI’s group will be in charge of.

• **Role in the entire research project and necessity :**

Describe the role which this Co-PI’s group plays in realizing the proposed research project.

Describe the following content in “d” of application guideline 5.1.3 (1) Selection Standards (Preliminary Evaluation Standards).

• An optimal research organization is proposed. The research project applicant will exercise strong leadership and bear responsibility for the entire research team, and, if there will be Co-PI, they are essential for to the pursuit of the research project, and a collaboration framework sufficient for enabling significant contributions toward the achievement of research objectives is provided.

• The research institutions with which the research project applicant and Co-PIs are affiliated have R&D capabilities and other technical foundations in the subject research field.

• **Reason of why this group is necessary for this project (applicable only to overseas Co-PI’s groups):**

※The research fund for the groups belonging to an overseas institution, in principle, not funded by JST. Researchers affiliated with overseas research institutions cannot be the Co-PI’s.

If you wish to form a research team that includes overseas research institutions, please state the reason why you need joint researchers affiliated with overseas research institutions. JST obtain approval from the research supervisor in the document screening.

• Necessity of the joint research group for achieving the goal of the project

• Availability of specific facility, equipment, environment, etc.

Describe briefly the necessity of the researcher/the research institute involved for achieving the goal of the proposed research project and the grounds for the difficulty in the implementation of the research unless a certain Co-PI’s Group is involved in terms of the specific research facility, equipment, environment, etc.

• **An alternative proposal for cooperation with the applicable group, in case a contract cannot not be concluded (applicable only to overseas Co-PI’s groups):**

※ Describe a proposal (the second-best option) for cooperation in the case in which JST does not finance the research.

• **The state of enforcement of the security trade control (applicable only when an overseas Co-PI’s Group is involved):**

※ Describe the state of enforcement of the security trade control concerning the research group of PI and the domestic Co-PI’s Group.

Research Budget

※ Prepare the budget plan and sort it by items and by groups for each year.

1. Research Budget Plan in Item (Entire Team) example

	1 st Year 2024.10~ 2025.3	2 nd Year 2025.4~ 2026.3	3 rd Year 2026.4~ 2027.3	4 th Year 2027.4~ 2028.3	5 th Year 2028.4~ 2029.3	Final Year 2029.4~ 2030.3	Total (Thousand yen)
Equipment	20,000	40,000	0	0	0	0	60,000
Materials/ Consumables	20,000	40,000	30,000	30,000	20,000	20,000	160,000
Travel	1,000	2,000	2,000	2,000	2,000	1,000	10,000
Personnel and Services (Number of Researchers)	6,000 (2)	12,000 (2)	12,000 (2)	12,000 (2)	12,000 (2)	6,000 (1)	60,000
Other	10,000	0	0	0	0	0	10,000
Total (Thousand yen)	57,000	94,000	44,000	44,000	34,000	27,000	300,000

Notes on writing research budget plans

- A more detailed budget plan will be requested when the proposal proceeds to the interview screening.
- The budget plan, after adopted, may be revised during the research period according to the state of the project, Research Area policy, and project evaluation, etc.

Budgeted costs are itemized as follows:

- Equipment: Cost for tangible properties with relatively expensive
- Materials / Consumables: Cost for purchasing materials and consumables
- Travel: Travel expenses of the PI or participants.
- Personnel and Services: Personnel expenses and compensation for postdoctoral researchers, technicians, research assistants (RA), etc.
- (Numbers of researchers): The number of researchers, technicians, and research assistants who are newly employed for the proposed research project
- Other: Costs other than the above (e.g., printing, equipment lease, freight costs, etc.)

Remarks on the research budget

Describe any remarks on applicable items if necessary, when a large amount of labor cost, travel cost, or the like is required.

2. Research Budget plan by group

- Propose a most suitable research team that is necessary and adequate for bringing the research idea of the research representative into reality. When a Co-PI's group is organized, the group must be necessary and essential for bringing a research idea into reality and be able to make great contributions to achieving the research objectives.

	1 st Year 2024.10～ 2025.3	2 nd Year 2025.4～ 2026.3	3 rd Year 2026.4～ 2027.3	4 th Year 2027.4～ 2028.3	5 th Year 2028.4～ 2029.3	Final Year 2029.4～ 2030.3	Total (Thousand yen)
PI's Group ○○○○ (**University)	20,000	40,000	25,000	25,000	20,000	15,000	145,000
Co-PI's Group 1 ○○○○ (**University)	20,000	30,000	10,000	10,000	5,000	5,000	80,000
Co-PI's Group 2 ○○○○ (**University)	17,000	24,000	9,000	9,000	9,000	7,000	75,000
Total (Thousand yen)	57,000	94,000	44,000	44,000	34,000	27,000	300,000

List of major equipment costing 10 million yen or more (item, estimated cost)

Example

*** Group

XXXXXX 15,000 Thousand Yen

XXXXXX 10,000 Thousand Yen

*** Group

XXXXXX 10,000 Thousand Yen

Research Achievements

(PI : (Example)Taro Gijyutsu)

【Author notation in English papers by the PI : (example) Taro Gijyutsu】

- ※ In the document screening, evaluators (research supervisor, research area advisor) sometimes search through publication databases to check achievements in detail. This requires the entry of the PI's name for publication [author notation in English papers by the PI].
- ※ Keep Form 6 within 10 items and within three pages.

- Please explain, based on your research experience, how the individual proposing the research (the "research sponsor") has the ability to carry out the research proposal, and, as the research team leader, how the research sponsor will be responsible for the research as a whole and how they have the ability to lead and manage the research team.
- Please also list any of the following achievements and results that are related to the research sponsor's research field or proposal: academic papers, books, international conference proceedings, invited lectures at major international conferences, awards, patents, licenses, entrepreneurship, datasets, software, standardizations, and past achievements as a principal researcher, etc. Please give priority to those that are most closely related to the content of the proposal and to those that are recent.
- Please provide a brief explanation of the importance of the achievements and results, as well as of the research sponsor's role. Please base your explanation on facts and make it as objective and quantifiable as possible (including JIF and hi-index, etc. is not required).
- For academic papers, list the paper name, the author names (list all authors and underline the research sponsor), the journal name, volume number and page, publication year, and bibliographic information (for books). Please only list papers that have already been published or whose publication has been finalized. Author names may be abbreviated as "J. Smith", etc.
- For patents, please list the application number, inventor, invention name, applicant, and filing date.
- The items listed may also be sequentially numbered and then the numbers may be referred to in the description of the research concept (Form 3-1).

Research Achievements (Co-PI(s))

○ Co-PI's Group 1

Co-PI : (example) Taro Kagaku (○○University)

【Author notation in English papers : (example) *Taro Kagaku*】

- ※ In the document screening, evaluators (research supervisor, research area advisor) sometimes search through publication databases to check achievements in detail. This requires the entry of the PI's name for publication [author notation in English papers]. When entering author(s) in 1. list of papers mentioned later, abbreviation to, for example, T. Kagaku is acceptable.
 - ※ Keep Form 7 within two pages per a Co-PI.
- Please explain, based on your research experience, how the individual proposing the research (the "research sponsor") has the ability to carry out the research proposal, and, as the research team leader, how the research sponsor will be responsible for the research as a whole and how they have the ability to lead and manage the research team.
 - Please also list any of the following achievements and results that are related to the research sponsor's research field or proposal: academic papers, books, international conference proceedings, invited lectures at major international conferences, awards, patents, licenses, entrepreneurship, datasets, software, standardizations, and past achievements as a principal researcher, etc. Please give priority to those that are most closely related to the content of the proposal and to those that are recent.
 - Please provide a brief explanation of the importance of the achievements and results, as well as of the research sponsor's role. Please base your explanation on facts and make it as objective and quantifiable as possible (including JIF and hi-index, etc. is not required).
 - For academic papers, list the paper name, the author names (list all authors and underline the research sponsor), the journal name, volume number and page, publication year, and bibliographic information (for books). Please only list papers that have already been published or whose publication has been finalized. Author names may be abbreviated as "J. Smith", etc.
 - For patents, please list the application number, inventor, invention name, applicant, and filing date.
 - The items listed may also be sequentially numbered and then the numbers may be referred to in the description of the research concept (Form 3-1).

Information on Other Supports

- ※ When PI or Co-PIs are receiving, apply for, or plan to apply for competitive funding programs (including CREST / PRESTO / ACT-X, AMED-CREST, PRIME) (*) or other research funds (all current research funds for individual research subjects, such as subsidies, grants, joint research funds, contract research funds, etc., including those from overseas), fill in the research project name, research period, role, amount of research expenses received by the individual, and effort. Please refer to "8.1 Measures against Unreasonable Duplication and Excessive Concentration" and "9 Limitations on Multiple Applications within the Strategic Basic Research Programs" of the application guidelines.
 - ※ Enter this proposed CREST project first, followed by other research projects in a descending order of the amount of research funds (for the whole period, only direct cost) the applicant receives.
 - ※ Add rows if needed.
- (*) When applying, the call of FY2021 is made based on the fact that the "Integrated Innovation Strategy 2020" stipulates that "disclosure of information on the status of acceptance of foreign funds is a requirement when applying for research funds." Therefore, it is clarified that research funds from overseas should also be entered in the form of "whether or not there is other support" (or "status of application / acceptance of research funds, etc." depending on the project). In addition to competitive funds, both domestically and internationally, please list all research funds such as grants from private foundations, contract research expenses from companies, and joint research expenses.

PI : Name (Affiliation)

No.	Program (Name of Institution)	Status	Title of Project (Name of Principal investigator)	Research Period	Role (Principal Investigator or co-Principal Investigator)	Research Fund Received	
						(1) Allocated Budget (For entire period) (2) FY 2025 (planned) (3) FY 2024 (planned) (4) FY 2023 (actual) (Thousand yen/unit)	2024 FY Effort (%)
-	CREST (This Application)	Submitted	Title of the proposed research project (Name of the PI)	2024.10 — 2030.3	Principal Investigator	(1) (2) (3) <i>*Same amounts in form 5 "2.PI's Group"</i>	30
(1)	Grants-in-Aid for Scientific Research, Fundamental research (S) (Japan Society for the Promotion of Science)	Awarded	Creating W by V (***)	2023.4 — 2026.3	Principal Investigator	(1) 100,000 (2) 50,000 (3) 25,000 (4) 5,000	10
(2)	ALCA, JST Strategic Basic Research Programs (Japan Science and Technology Agency)	Submitted	Achieving high performance in X by Y (***)	2024.10 — 2030.3	Co-Principal Investigator	(1) 90,000 (2) 35,000 (3) 8,000 (4) -	-
(3)						(1) (2) (3)	

						(4)	-	
--	--	--	--	--	--	-----	---	--

【Notes for Description of the information on other supports】

- Due to unavoidable circumstances, e.g. confidentiality agreement, it is possible to submit without filling in the items other than effort. (This research proposal will be provided to outside experts during the screening process.)
- If the information entered in the research proposal differs from reality, the research project may be rejected.
- We may ask for application and plan documents submitted to other systems when a proposal reaches the interview screening.

(1) Status

Enter one of the following.

Do not enter effort for a theme corresponding to "Submitted" except for the CREST proposed theme.

Awarded: It is currently awarded, or decided to be awarded.

Submitted: It is at the state of selection and it is yet to be decided to be awarded.

(2) Role

Enter one of the following.

Principal Investigator:

Research fund is to be received as a representative for the research theme.

Co-Principal Investigator:

Research fund is to be received as a person in a non-representing position for the research theme

(3) Research fund received

Enter the amount of the research fund in thousand yen in a following manner.

(a) Awarded as "Principal Investigator" in the research project

Enter the amount of the research fund of the team supervised by the Principal Investigator, excluding that of joint research teams.

(b) Awarded as "Co-Principal Investigator"

Enter the amount of the research fund of the joint research team represented by the Co-Principal Investigator.

(4) Effort

Enter "ratio of time (%) necessary for conducting research relative to 100% for the whole work hours during the CREST research period (2024.10-2025.3) in fiscal year 2024 if adopted for CREST. Do not enter effort for themes that are already applied and in the process of selection, or that are planned to be applied (those entered as "Submitted").

Take care that the sum of effort for the theme proposed for CREST and other themes that are entered as "Awarded" does not exceed 100%.

Co-PI (1) : Name (Affiliation)

No.	Program (Name of Institution)	Status	Title of Project (Name of Principal investigator)	Research Period	Role (Principal Investigat or or co- Principal Investigat or)	Research Fund Received (1) Allocated Budget (For entire period) (2) FY 2025 (planned) (3) FY 2024 (planned) (4) FY 2023 (actual) (Thousand yen/unit)	2024 FY Effort (%)
-	CREST (This Application)	Subm itted	<i>Title of the proposed research project (Name of the PI)</i>	2024.10 — 2030.3	Co- Principal Investig ator	(1) (2) (3) <i>*Same Amounts in form 5 "2.Co-PI's group 1"</i>	20
(1)	Health and Labor Sciences Research Grants (Ministry of Health, Labor and Welfare)	Awar ded	Deployment for Z (** **)	2021.9 — 2026.3	Princip al Investig ator	(1) 50,000 (2) 20,000 (3) 20,000 (4) 5,000	10
(2)						(1) (2) (3) (4)	
(3)						(1) (2) (3) (4)	

Other Special Remarks

- ※ In Form 9, Provide an overall description of other special remarks within four A4-size sheets (no exceptions). (If this instruction is not followed, the research proposal might not be accepted.) For items that have check boxes, please check the applicable ones.
- ※ Please refer to “Chapter 5, 5.1.2 (2)” in the application guidelines and state whether or not you have a conflict of interest.
- ※ Until previous years, research applicant who had a conflict of interest with the research supervisor were excluded from selection, however this will be abolished from FY2024. (refer to Ch 5.1.1)

1. Conflict of interest between the applicant and evaluators

- (1) Conflict of interest between the research applicant (PI) and evaluators (research supervisor, research area advisor)

Follow the description of application guideline “5.1.2 (2)① Persons Involved in the Selection Process” to describe conflict of interest of the research applicant shared with the research supervisor or research area advisor of the research area to which the proposal is submitted.

- (a) Conflict of interest between the research applicant and the research supervisor (as an evaluator):

YES NO

If YES, state the reason.

The research applicant conducted joint research with the research supervisor on ○○project (20xx-20xx). It comes under condition (d) for conflict of interest stipulated in 5.1.2(2)①.

- (b) Conflict of interest between the research applicant and the research area advisor(s):

YES NO

If YES, write the name of research area advisors with conflict of interest and state the reason.

Research area advisor with conflict of interest: (The Advisor’s Name)

Reason: The research applicant is conducting joint research with the research area advisor in ** project. It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2)①.

<Note for Description>

Follow the description of application guideline “5.1.2 (2)① Persons Involved in the Selection Process” to describe conflict of interest of each Co-PI shared with the research supervisor to which the proposal is submitted.

Evaluators who, based on the listed information, are deemed by JST to have a conflict of interest will be excluded from proposal review, will not be allowed to speak at document screening meetings, and will not be allowed to meet face-to-face during the interview screening meetings, so please make sure to

clearly list the names of any evaluators who have a conflict of interest. For a list of area advisors, please refer to the Proposed Research Areas homepage. A link to it can be found on the Call for Proposals homepage.

[Application Guideline 5.1.2.(2): Conditions for those with conflict of interest (summary)]

- (a) Persons, who are relatives of applicants.
- (b) Persons, who are affiliated with the same department or specialty at a university to which the applicants are affiliated, who are board members or are considered affiliated members of the same university or managed corporation, or who act as the represent of the university. Here, "same department or specialty" means a one rank above group of the smallest research unit.
- (c) Persons, who are affiliated with the same or group company with which applicants are affiliated.
- (d) Persons, who are conducting a close collaboration in a research work with applicants. (Examples are persons, who are conducting a joint research project or have co-authored a paper with applicants, a researcher pursuing the same research objectives as a applicants, a participant or a Co-PI of the research project, others, being recognized those practically affiliated with same research group.)
- (e) Persons in a close teacher-student relationship, or in a direct employer-employee relationship.
- (f) Persons in relationships of direct competition with applicants.
- (g) Persons in other relationships judged by JST to representing conflicts of interest with applicants.

(2) Conflict of interest between the Co-PIs and evaluators (the research supervisor/ research area advisors)

Follow the description of application guideline "5.1.2 (2)① Persons Involved in the Selection Process" to describe conflict of interest of the Co-PIs shared with the research supervisor or research area advisor of the research area to which the proposal is submitted.

(a) Co-PI (1): (Name), (Affiliation)

1) Conflict of interest with the research supervisor (as an evaluator):

YES NO

If YES, state the reason.

Reason: He/She is conducting joint research with the research supervisor in ** project (20xx-20xx). It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2).

2) Conflict of interest with the research area advisor(s):

YES NO

If YES, write the name of research area advisors with conflict of interest and state the reason.

Research area advisor with conflict of interest: (The Advisors' Name)

Reason: He/She is conducting joint research with the research area advisor in ** project. It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2).

(b) Co-PI (2): (Name), (Affiliation)

1) Conflict of interest with the research supervisor:

YES NO

If YES, state the reason.

Reason: He/She is conducting joint research with the research supervisor in ** project (20xx-20xx). It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2).

2) Conflict of interest with the research area advisor(s):

YES NO

If YES, write the name of research area advisors with conflict of interest and state the reason.

Research area advisor with conflict of interest: (The Advisors' Name)

Reason: He/She is conducting joint research with the research area advisor in ** project. It comes under conditions (d) for conflict of interest stipulated for 5.1.2(2).

<Note for Description>

Based on the listed information, JST may take measures such as asking the research supervisor/area advisor to refrain from speaking during the document screening meetings/interview screening meetings for proposal screening discussions that include the principal co-researcher(s) in question.

[Application Guideline 5.1.2.(2): Conditions for those with conflict of interest (summary)]

- (a) Persons, who are relatives of applicants.
- (b) Persons, who are affiliated with the same department or specialty at a university to which the applicants are affiliated, or persons who are affiliated to a corporation managed by the applicants. Here, "same department or specialty" means a one rank above group of the smallest research unit.
- (c) Persons, who are affiliated with the same or group company with which applicants are affiliated.
- (d) Persons, who are conducting a close collaboration in a research work with applicants. (Examples are persons, who are conducting a joint research project or have co-authored a paper with applicants, a researcher pursuing the same research objectives as a applicants, a participant or a Co-PI of the research project, others, being recognized those practically affiliated with same research group..)
- (e) Persons in a close teacher-student relationship, or in a direct employer-employee relationship.
- (f) Persons in relationships of direct competition with applicants.
- (g) Persons in other relationships judged by JST to representing conflicts of interest with applicants.

2. Co-PI's group organization that is related to the PI (organizations etc. established based on R&D achievements by the PI etc.)

Follow the instructions in Application Guideline "5.1.2,(2)② Conflict of Interest with Research Director (CREST PI)" to describe whether the organization to which the Co-PI belongs is an organization in relation

to the PI.

Organization that is related to the PI:

YES NO

If YES, write the name of the organization and the Co-PIs as well as state the reason.

The name of the organization (the Co-PI's name participating): XX Corporation (Taro Kagaku)

Reason: This organization was established based on R&D achievement by the research director, which conforms to Item (a) among the requirements defined in 5.1.2 (2) ②.

<Notes for Description>

“An organization that is related to the PI” refers to any of the organizations that fall under the following categories. Items “a” and “b” are applicable not only to the PI but also to the spouse and the relatives in the first degree of the research representative (hereinafter referred to as “the PI etc.”).

a. An organization established based on R&D achievement of the PI etc.

(Including the case in which the researcher or the like is not directly involved in the business management but is merely given a title such as technical consultant and the case in which the researcher or the like has stocks.)

b. An organization in which the PI etc. is a director (including a CTO but excluding a technical consultant)

c. An organization whose PI has stocks.

d. An organization whose PI is rewarded for implementation.

3. Participation by a research group of a company financed by JST

Follow the instructions in Application Guideline “5.1.2 (2)③ Conflict of Interest with JST” to describe whether the organization to which the PI belongs or to which a Co-PI belongs is a company in which JST has invested.

Participation by a company financed by JST:

YES NO

If YES, write the name of the organization and the PI / the Co-PIs.

The name of the organization (the PI): XX Corporation (Taro Kagaku)

The name of the organization (a Co-PI): XX Corporation (Taro Kagaku)

<Notes for Description>

• For the companies in which JST has invested, access the following website. The companies in which JST has terminated the investment are not within the scope of our management of the conflict of interest. You do not need to describe such companies.

<https://www.jst.go.jp/entre/result.html#M01>

• The standard date to determine the applicability of the conditions described above is the date on which we begin accepting applications. Describe the companies that are disclosed as a company in

2024 (CREST)

which JST has invested as of the standard date. If a company is one of the companies in which JST is going to invest but is not disclosed as such, do not describe such a company for the sake of the secrecy of the internal information of JST.

- For the disclosed information on the investment made by JST, access the following website.

<https://www.jst.go.jp/entre/news.html>

4. (Only for those relevant group) The confirmation regarding research implementation at overseas research institutions

(1) The contact of the manager at the department or the division in charge of the research agreement at the overseas research institute

Enter name, affiliation, e-mail address, and telephone number.

(2) Things to check in advance

Please check the following items.

Check Items	Check
The overseas research institution where the research will be conducted has agreed to the following: (refer to “Collaborative Research Agreement”) • When disbursing research funds provided by JST, indirect costs do not exceed 30% of direct costs. • Submit an accounting report in the format prescribed by JST, describing the use of research funds. Comply with the use of expenditure items specified by JST in accounting reports.	<input type="checkbox"/>
If Co-PI is a postdoctoral fellow affiliated with an overseas research institution, the supervisor of the affiliated laboratory has given consent to carry out the research if this proposal is adopted.	<input type="checkbox"/>

<Notes for Description>

- A research contract needs to be concluded between JST and the overseas research organizations. For this reason, check with the person responsible for research contracts at the overseas research organization to find whether a research contract could be concluded using the template for research contracts with overseas research organizations.
https://www.jst.go.jp/kisoken/boshuu/teian/koubo/agreement_crest.pdf
- JST may directly check whether a contract could be concluded with the overseas research organization with a person at its department responsible for research contracts through the research applicant after the deadline for proposals. For this purpose, enter the contact (name, affiliation, e-mail address, telephone number) of the person responsible for research contracts at the overseas research organization.
- Before the interview screening, submit a form (required for only the applicant who is to be interviewed after the document screening) for entering whether the person responsible for research contracts at the research organization approves the requirements for the research contract

presented by JST (*).

(*) JST's Requirements for research contract: The payment for indirect expenses does not exceed 30% of the direct expenses (research expenses). The intellectual property rights for the results of the proposed research must be shared in half (50:50) with JST. The Research Institute shall disclose to JST each intellectual property right created in performing the Collaborative Research within 10 business days. The overseas organization must prepare and provide JST with detailed documents describing pertinent expenses in English. For the details, see "template for research contracts with overseas research organizations" described above.

5. (Only for those relevant) special notes for efforts by a PI

If the PI (Managers such as the Dean of the Graduate School) requires work time(efforts) for a special task, please indicate so.

6. The other special remarks:

- If you are submitting multiple applications for the same research area, please describe the differences from the previous proposal.
- If you have any plans for a change, please let us know.
- Please feel free to use any other information such as describing your enthusiasm for this research proposal.