

FY2023

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

- (note 1) Japanese side 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 JST also prohibits the withdrawal of proposals on e-Rad after the deadline and will not accept any proposal that was withdrawn, whatever the reason may be.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.

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
Form 2-1	Research Proposal Overview
Form 2-2	Major Achievements of the Research Director
Form 3-1	Project Description
Form 3-2	Project Organization and Research schedule
Form 4-1	Research Project Organization 1
Form 4-2	Research Project Organization 2
Form 5	Research Budget
Form 6	List of Achievements / Ex-Post Evaluation Results (Research Director)
Form 7	List of Achievements (Lead Joint Researcher(s))
Form 8	List of Patents (Research Director & Lead Joint Researcher)
Form 9	Information on Other Supports
Form 10	Protection of Human Rights and Compliance with Laws and Regulations
Form 11	Other Special Remarks

* File sizes should not exceed 3MB in total.

Notice

Form 1-2, 4-5, 7-8 and 11 should be filled in both Japanese Side and French side.

In this instruction, the Japanese side is mainly used as an example.

FY 2023 Application CREST [MultiSensing] Research Proposal

*This is an application form for JST’s CREST: “Research on multi-sensing biosystems and development of adaptive technologies”.

Fill in form 1 within one page of A4 paper (observe strictly).

You may delete notes in italics and blue characters in this and other forms.

Japanese Side

Research Area	Research on multi-sensing biosystems and development of adaptive technologies
Title of proposed research project	<i>When the title is in English, describe the title also in Japanese (about 20 characters) along with the English title.</i>
Name of Research Director	
Affiliated Institution, Section, Title	<i>Describe the affiliation and title accurately without any omission. (i.e., describe Graduate school, Department, Majors, XX laboratory, and project/tenure/associate/assistant professor)..</i>
Academic Background	<p>(Entry example)</p> <p>Graduated from Faculty of xxxx, xxxx University, in 20XX</p> <p>Graduated from Engineering xxxx major, Graduate School xxxx of xxxx University in 20XX (Instructor: Professor xxxx) 【Instructor Name Required】</p> <p>Completed Ph.D. in Graduate School of xxxx University in 20XX (Instructor: Professor xxxx) 【Instructor Name Required】</p> <p>Doctoral Acquisition (xxxx) (xxxx university) in 20XX</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><u>Notes: Delete this textbox of notes in submission.</u></p> <p>To describe the Form 1 to 11, please follow the “Instructions for Preparing a Proposal”.</p> <p>Fill in <u>Form 1 on one page of A4-size sheet (no exceptions).</u></p> <p>You may delete notes in italics (slanting characters) in this and other Forms.</p> <p>When information entered in e-Rad is different from that in research proposal documents, the latter will be considered correct. Moreover, Pay attention to the unit of total budget (i.e., Thousand Yen)</p> </div>

Professional Appointments and Awards (Research Director)	(Entry Example: It is essential to include the director's name of the belonged laboratory.) Research history: 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 Major Awards Received: xxxx Award Winner in 20XX Reasons for receiving award: Excellent achievements in xxxx study
Information of Research Director	URL: Please indicate URL if there are any websites where the information of the Research Director is available (such as a website of his/her laboratory or researchmap webpage, etc.).
Research Period	[Oct. 2023] – [mm. yy] (xx years)
Total Research Budget	Total Budget: thousand yen (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.))

French Side

Name of Research Director	
Affiliated Institution, Section, Title	
Academic Background (After graduation of University)	
Professional Appointments and Awards (Research Director)	
Information of Research Director	URL:
Research Period	[mm. yy] – [mm. yy]
Total Research Budget	Total Budget: keuros

Research Proposal Overview

Outline of Research Project

- In Form 2-1, Provide an overall description *and* “*Graphical Abstract*” regarding the research proposal in two or less 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). Unlike form 3-1 (project description), it is not allowed to cite numbers of papers that are shown in the list of achievements (form 2-2, form 6, and form 7).

<Graphical Abstract; A single figure representing the proposed research>

- Form 2-1 is an important material for the document screening to be evaluated from the perspectives below:
 1. Is it aligned with the goals of the Research Area? (Can the proposal be expected to contribute to fulfilling the purpose of the Research Area? Mainly, does the proposal correspond to items a. and b. 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”
 - ”b-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 c. 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.
- Insert figures and tables (in color, permitted) appropriately to be undertaken clearly.

Major Achievements of the Research Director(Japanese Side)

List of principal research papers / invited lectures

- In Form 2-2, on one page of A4-size sheet (no exceptions), list your principal research papers and invited lectures (If this instruction is not followed, the research proposal might not be accepted).
- Adjustment to font size and line spacing is acceptable.
- Do not include works by Lead Joint Researcher(s).

(1) List of principal research papers (within 10 papers)

- From CREST Form 6, Item 1, select a maximum of 10 principal research papers by the research project applicant (the Research Director) and list them here (Use the same description and format as from CREST Form 6, Item 1)
- Make entries retrospectively from the present to the past years of publication.
- Sequentially number each item with a number at the beginning of each title.
- The following items should be entered for a paper (books follow the same guidelines). The items may be in a freely chosen sequence.

[Items to be entered]

Authors (enter all authors and underline the applicant), title of a paper, journal in which the paper is published, volume, page, and year of publication

(2) List of principal invited lectures (within 10 lectures)

- List a maximum of 10 principal invited lectures by the research project applicant (the Research Director).
- Sequentially number each item with a number at the beginning of each title.
- Make entries retrospectively from the present to the past years of publication.

Major Achievements of the Research Director (French Side)

List of principal research papers / invited lectures

- *In Form 2-2, on one page of A4-size sheet (no exceptions), list your principal research papers and invited lectures (If this instruction is not followed, the research proposal might not be accepted).*
- *Adjustment to font size and line spacing is acceptable.*
- *Do not include works by Lead Joint Researcher(s).*

(1) List of principal research papers (within 10 papers)

(2) List of principal invited lectures (within 10 lectures)

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 (Research Director) and 7 (Lead Joint Researcher) 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.*

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. According 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 (research director's group, and each joint research 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 Research Director 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 research director and those of lead joint researchers and other research participants (if necessary).
- Other preliminary knowledge, data, etc. (if any)
- Measures taken to the item "d" in "5.1.3 (1) Selection Perspective" from application guideline
<Excerpt from the item "d" in "5.1.3 (1) Selection Perspective">
 - The research project applicant has produced research results for accomplishing the research objectives.
 - Promising preliminary results have been obtained for pursuing the research project.
 - The research proposals is clearly specifying (i) the background to the research project (its necessity and importance), (ii) the research record of the research project applicant; and (iii) the research initiative and plan., separately.
 - 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 Lead Joint Researchers, 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

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.

7. Specific for collaboration

Project Organization and Research Schedule

For Form3-2, 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

Japanese Side

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

French Side

Group Name	Name of Research Director/ Lead Joint Researcher	Affiliation and Title	Title of Research Theme

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 “Research Director’s Group”, “Joint Research Group” is changed by those specified in the previous item 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.

Research Subjects	2023 Fiscal year (6 months)	2024 Fiscal Year	2025 Fiscal Year	2026 Fiscal Year	2027 Fiscal Year	2028 Fiscal Year (12months)
1. XX related Gene Expression Analysis <ul style="list-style-type: none"> • Identification of XX related genes (Research Director’s Group) • Gene Expression Analysis (Joint Research Group 1,2) 						
2. Development and verification of model animal <ul style="list-style-type: none"> • Development of model animal (Research Director’s Group) • Verification of model animal (Joint Research Group 2) 						
3. Imaging Analysis <ul style="list-style-type: none"> • Data Collection (Research Director’s Group Joint Research Group 1) • Development of software (Joint Research Group 2) • Data Analysis (Research Director’s Group) 						
4. Development of XX Diagnostic Method <ul style="list-style-type: none"> • Elucidation of XX Correlation (Research Director’s Group) • Development of diagnostic method and verification (Joint Research Group 1) 						

Research Project Organization 1 (Japanese Side)

(Research Members of the Research Director'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.)

Research Director's Group *example*

Research Director	Research Institution ¹⁾ , Department	Title
○○ ○○	Department of ***, Graduate School of ***, ***, University	Professor
Research Participants ^{2,3)}	Affiliation ⁴⁾ , Department (Omit if the same as above)	Title
○○ ○○		Professor
○○ ○○		Associate Professor
○○ ○○		Lecturer
×× ××	*** Laboratory, *** Co., Ltd.	Principal Researcher

- 1) If the proposed research project is selected, but the research organization to pursue the project will be different from the current affiliated organization of research director, provide the name of the institution at which the research will be conducted. Also, provide us with information on the details in the form 11.
- 2) Provide sufficient consideration to the roles played by the members of the research group.
- 3) 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.
- 4) 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 research director 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 joint research group (See also the Q&A.).

○ 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 research director's group is in charge.

• Overview of the research :

Describe briefly an overview of the research subjects that the Research Director's Group will be in

charge of.

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

Describe the role which the Research Director's group plays in realizing the proposed research project.

Research Project Organization 2 (Japanese Side)

(Research Members of the Joint Research Group)

- If Japanese joint research groups (joint research institutions) other than the Research Director's affiliated institutions are 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 joint research group. (If this instruction is not followed, the research proposal might not be accepted).
- The research expenditures of overseas joint research groups are funded only when the participation of the groups is essential to realize the research concept. Elaborate the necessity in detail in particular. Further, such funds are applicable only when the implementation of the research is difficult unless the overseas joint research groups are involved; therefore, describe the grounds. Even if the necessity of such joint research groups is recognized, the research expenditures of the overseas joint research groups may not be funded if the terms and conditions of the contract are not acceptable. In this case, describe a proposal for cooperation (the second-best option).

Joint Research Group (1) example

Lead Joint Researcher	Joint Research Institution ¹⁾ , Department	Title
○○ ○○	Department of **, ***University	Professor
Research Participants ^{2,3)}	Affiliation ⁴⁾ , Department (Omit if the same as above)	Title
○○ ○○		Principal Researcher
○○ ○○		Researcher
2 researchers to be hired		Research fellow
×× ××	*** Laboratory, *** Co., Ltd.	Principal Researcher

- 1) 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 lead joint researcher, provide the name of the organization at which the research will be conducted. Also, provide us with information on the details in the form 11.
- 2) Provide sufficient consideration to the roles played by the members of the research group.
- 3) 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.
- 4) 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 lead joint researcher 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 joint research group (See also the Q&A.).

○ **Research Subjects and Overview**

• **Title of Research Theme of the Joint Research 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 joint research group is in charge.

• **Overview of the research :**

Describe briefly an overview of the research subjects that this Joint Research Group will be in charge of.

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

Describe the role which this joint research group plays in realizing the proposed research project.

Also, specify the measures taken to the item “d” in “5.1.3 Selection Perspective (1)” from application guideline

<Excerpt from the item “d” in “5.1.3 Selection Perspective (1)”>

- 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 Lead Joint Researchers, 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.

• **Reason of why this group is necessary for this project (applicable only to overseas joint research groups in Japanese side):**

- **Necessity of the joint research group for achieving the goal of the project**
- **Availability of specific 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 joint research groups in Japanese side):**

• **The state of enforcement of the security trade control (applicable only when an overseas joint research group is involved in Japanese side):**

•

Joint Research Group (2)

Lead Joint Researcher	Joint Research Institution, Department	Title
Research Participants	Affiliation, Department (Omit if the same as above)	Title

○ **Research Subjects and Overview**

- **Title of Research Theme of the Joint Research Group :**

- **Research Subjects in Charge :**

- **Overview of the research :**

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

- **Reason of why this group is necessary for this project (applicable only to overseas joint research groups):**
 - **Necessity of the joint research group for achieving the goal of the project**
 - **Availability of specific 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 joint research groups in Japanese side):**

- **The state of enforcement of the security trade control (applicable only when an overseas joint research group is involved in Japanese side):**

Research Project Organization 1 (French Side)

(Research Members of the Research Director'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.

Research Director's Group

Research Director	Research Institution, Department	Title
Research Participants	Affiliation, Department (Omit if it is same as above)	Title

○ Research Subjects and Overview

- Title of Research Theme :

- Research Subjects in Charge :

- Overview of the research :

- Role in the entire research project :

Research Project Organization 2 (French Side)

(Research Members of the Joint Research Group)

-If French joint research groups (joint research institutions) other than the Research Director's affiliated institutions are required, list them in Form 4-2 (this form) per joint research institution.

- This form should be described within two or less A4-size sheets (no exceptions) for each joint research group. (If this instruction is not followed, the research proposal might not be accepted).

Joint Research Group (1)

Lead Joint Researcher	Joint Research Institution, Department	Title
Research Participants	Affiliation, Department (Omit if the same as above)	Title

○ **Research Subjects and Overview**

- **Title of Research Theme of the Joint Research Group :**

- **Research Subjects in Charge :**

- **Overview of the research :**

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

Research Budget (Japanese Side)

- Prepare the budget plan and sort it by items and by groups for each year.
- 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.
- Organize an optimal research team with necessary and sufficient number of groups. Appropriateness of the budget allocations to the joint research groups, and cost performance will be an important consideration as a part of the selection process.

1. Research Budget Plan in Item(Entire Team on Japanese Side)

	1 st Year 2023.10~ 2024.3	2 nd Year 2024.4~ 2025.3	3 rd Year 2025.4~ 2026.3	4 th Year 2026.4~ 2027.3	5 th Year 2027.4~ 2028.3	Final Year 2028.4~ 2029.3	Total (Thousand yen)
Equipment							
Materials/ Consumables							
Travel							
Personnel and Services (Number of Researchers)	()	()	()	()	()	()	
Other							
Total (Thousand yen)							

Note

2. Research Budget plan by group on Japanese Side

	1st Year 2023.10~ 2024.3	2nd Year 2024.4~ 2025.3	3rd Year 2025.4~ 2026.3	4th Year 2026.4~ 2027.3	5th Year 2027.4~ 2028.3	Final Year 2028.4~ 2029.3	Total (Thousand yen)
Research Director's Group ○○○○ (**University)							
Joint Research Group1 ○○○○ (**University)							
Joint Research Group2 ○○○○ (**University)							
Total (Thousand yen)							

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

Research Budget (French Side)

1. Research Budget Plan in Item (Entire Team on French Side)

	1st Year 2023.10~ 2024.3	2nd Year 2024.4~ 2025.3	3rd Year 2025.4~ 2026.3	4th Year 2026.4~ 2027.3	5th Year 2027.4~ 2028.3	Final Year 2028.4~ 2029.3	Total (Thousand yen)
Equipment							
Materials/ Consumables							
Travel							
Personnel and Services (Number of Researchers)	()	()	()	()	()	()	
Other							
Total (Thousand Euro)							

(Duplicate on for each French Partner)

Note

List of Achievements/Ex-Post Evaluation Results (Japanese Side)
(Research Director : (Example)Taro Gijyutsu)

【Author notation in English papers by the research director : (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 research director's name for publication [author notation in English papers by the research director]. When entering author(s) in 1. list of papers mentioned later, abbreviation to, for example, T. Gijyutsu is acceptable.

1. Principal papers, books, and other publications related to this research proposal

–within 20 achievements

- List a maximum of 20 principal papers, books, and other publications related to this research proposal, starting from the most recent to the past in reverse sequence of year of publication.
- Assign a serial number in front of a line. The number may be cited in the Project Description (form 3-1).
- Items to be included for papers are as follows (books follow the same guidelines). The items should be placed freely in any order.

[items to be included]

Author (Enter all authors and underline the name of Research Director), title of published paper, journal, volume, page, publication year

2. Research papers/publications other than the above –within 20 achievements

- In addition to 1 above, list a maximum of 20 principal papers, books, and other publications of the Research Director, starting from the most recent to the past in reverse sequence of year of publication.
- Assign a serial number in front of each line. However, the numbers should be sequential starting with “1. Principal papers, books, and other publications related to this research proposal” (for example, when 10 papers are cited for 1. “Principal papers, books, and other publications related to this research proposal” papers cited in this item 2. should begin with “11” followed by serial numbers.
- Items to be included for papers are as follows (books follow the same guidelines). The items should be placed freely in any order.

[items to be included]

Author (Enter all authors and underline the name of Research Director), title of published paper, journal, volume, page, publication year

3. Ex-Post evaluation of research projects that the research applicant represented in other systems of competitive research funds

Enter in the table below a list of projects that the research director represented (restricted to those disclosed in 2015 and thereafter) and for which Ex-post evaluation is disclosed. Delete the table and enter “not applicable” if no relevant project exists.

Number	Research Program	Research Project (Fiscal Year Implemented)	URL of website with Ex-post evaluation result <i>*if the website contains many projects that are not those of yourself, write page numbers of your own projects to facilitate checking by evaluators.</i>
1			
2			

List of Achievements/Ex-Post Evaluation Results (French Side)**(Research Director : (Example)Taro Gijyutsu)****【author notation in English papers by the research director : (example) Taro Gijyutsu】**

1. Principal papers, books, and other publications related to this research proposal
 –within 20 achievements

2. Research papers/publications other than the above –within 20 achievements

3. Ex-Post evaluation of research themes that the research applicant represented in other systems of competitive research funds

Enter in the table below a list of themes that the research director represented (restricted to those disclosed in 2017 and thereafter) and for which Ex-post evaluation is disclosed. Delete the table and enter “not applicable” if no relevant theme exists.

Number	Research Program	Research Project (Fiscal Year Implemented)	URL of website with Ex-post evaluation result
1			
2			

List of Achievements (Lead Joint Researcher(s)) (Japanese Side)

○ Joint Research Group 1

Lead Joint Researcher : (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 research director'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.

List of Achievements (Lead Joint Researcher 1) *within 10 achievements

- For each lead joint researcher, list a maximum of 10 principal papers, books, and other publications related to this research proposal, starting from the most recent to the past in reverse sequence of year of publication.
- Assign a serial number in front of a line. The number may be cited in the Project Description (form 3-1).
- Items to be included for papers are as follows (books follow the same guidelines). The items should be placed freely in any order.

[items to be included]

Author (Enter all authors and underline the name of Lead Joint Researcher), title of published paper, journal, volume, page, publication year

○ Joint Research Group 2

Lead Joint Researcher : (example) Hanako Kagaku (○○ University)

【Author notation in English papers : (example) *Hanako 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 research director's name for publication [author notation in English papers]. When entering author(s) in 1. list of papers mentioned later, abbreviation to, for example, H. Kagaku is acceptable.

List of Achievements (Lead Joint Researcher 2) *within 10 achievements

- For each lead joint researcher, list a maximum of 10 principal papers, books, and other publications related to this research proposal, starting from the most recent to the past in reverse sequence of year of publication.
- Assign a serial number in front of a line. The number may be cited in the Project Description (form 3-1).
- Items to be included for papers are as follows (books follow the same guidelines). The items should be placed freely in any order.

[items to be included]

Author (Enter all authors), title of published paper, journal, volume, page, publication year

**List of Patents (Research Director and Lead Joint Researcher(s))
(Japanese Side)**

Major Patents

List important patent applications of recent years that are related to this proposal. Do not exceed one page.

[Items to be entered]

Application number, inventor, title of invention, applicant, and date of application

1. Research Director (Name (Affiliation))

2. Lead Joint Researcher

2.1 Joint Research Group 1 Lead Joint Researcher: (Name (Affiliation))

2.2 Joint Research Group 2 Lead Joint Researcher: (Name (Affiliation))

**List of Patents (Research Director and Lead Joint Researcher(s))
(French Side)**

Major Patents

List important patent applications of recent years that are related to this proposal. Do not exceed one page.

Please note; Patent number, Inventor's name, Title of invention, Name of applicant, Date of application, etc.

1. Research Director (Name (Affiliation))

2. Lead Joint Researcher

2.1 Joint Research Group 1 Lead Joint Researcher: Name (Affiliation)

2.2 Joint Research Group 2 Lead Joint Researcher: Name (Affiliation)

Information on Other Supports

Research Director : 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 (Thousand yen/unit)		2023 FY Effort (%)
						(1) Allocated Budget (For entire period)	(2) FY 2024 (planned) (3) FY 2023 (planned) (4) FY 2022	
-	CREST (This Application)	Submitted	Title of the proposed research project (Name of the Research Director)	2023.10 — 2029.3	Principal Investigator	(1) (2) (3) ※See also form 5-2 "Research Director's Group"	-	30
(1)	Grants-in-Aid for Scientific Research, Fundamental research (S) (Japan Society for the Promotion of Science)	Awarded	Creating W by V (***)	2022.4 — 2025.3	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 (***)	2023.10 — 2029.3	Co-Principal Investigator	(1) 90,000 (2) 35,000 (3) 8,000 (4) -	-	-
(3)						(1) (2) (3) (4)	-	-

[Notes]

- A proposal that was once adopted may be revoked if an entry differs from reality.
- We may ask for application and plan documents submitted to other systems when a proposal reaches the interview stage.
- Enter this proposed CREST theme first, followed by other research themes in a descending order of the amount of research funds (for the whole period, direct cost) the applicant receives.
- Add rows if needed.

Lead Joint Researcher (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 2024 (planned) (3) FY 2023 (planned) (4) FY 2022 (Thousand yen/unit)	2023 FY Effort (%)
-	CREST (This Application)	Sub- mitted		2023.10 —	Co- Principal Investigat or	(1) (2) (3)	
(1)				—		(1) (2) (3) (4)	
(2)				—		(1) (2) (3) (4)	
(3)				—		(1) (2) (3) (4)	

Lead Joint Researcher (2) : Name (Affiliation)

No.	Program (Name of Institution)	Status	Title of Project (Name of Principal investigator)	Research Period	Role (Principal Investigato r or co- Principal Investigato r)	Research Fund Received (1) Allocated Budget (For entire period) (2) FY 2024 (planned) (3) FY 2023 (planned) (4) FY 2022 (Thousand yen/unit)	2023 FY Effort (%)
-	CREST (This Application)	Sub- mitted		2023.10 —	Co- Principal Investigat or	(1) (2) (3)	
(1)				—		(1) (2) (3) (4)	
(2)				—		(1) (2) (3) (4)	

Protection of Human Rights and Compliance with Laws and Regulations (Japanese Side)

It is confirmed that laws and guidelines to be complied with have been understood and drawn up for this research plan. Furthermore, we confirm that laws and guidelines will be complied with in implementing this plan.

(Examples of laws and guidelines to be followed)

- “Guidelines for handling dishonest conduct in research activities” (decision by Minister of Education, Culture, Sports, Science and Technology, August 26, 2014, including succeeding revisions)

- “Guidelines for management and audit of public research fund by research organizations (criteria for implementation), put in effect on February 18, 2007”/revision decided by the Minister of Education, Culture, Sports, Science and Technology, including succeeding revisions”

- Concerning control for trade security (dealing with technology leaks to overseas parties), foreign exchange and foreign exchange law, laws, ministerial ordinances, and official notices set out by ministries to prevent the results of advanced research from being passed to those who are suspected to conduct activities including applications for military purposes, such as those who develop weapons for mass destruction or terrorist groups

- Laws of related countries when conducting research overseas (including taking out biological resources) or joint research with an overseas research organization

- As for research in life science, laws, ministerial ordinances, and ethical guidelines set out by ministries for life ethics and security

(Enter a check mark in the box when confirmed)

Confirmed.

(by Research Director on Japanese side)

Other Special Remarks

In Form 11, Provide an overall description of other special remarks in less than three 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.

Consent to sharing this proposal with AMED

This research area is a cooperative research area with AMED. JST may share this proposal with AMED during the selection process. Please check the box below to confirm your agreement to JST's sharing this proposal with AMED.

Agreed

Order of the research areas in which you wish to be adopted (In the case of duplicate applications in JST-CREST and AMED-CREST research areas)

If you are selected as a candidate for adoption by both AMED and JST, please check the box below for the research area in which you wish to be adopted (your first choice).

JST_CREST

AMED-CREST

The other special remarks:

Differences from the previous application (in case of applications that have been made to the research area two times or more), Change of research institute affiliation, other special notes