Proposal Preparation Checklist (CREST – Appendix)

Prior to electronic submission via e-Rad, please ensure that proposals comply with the instructions in the format specified.

Just before the deadline, e-Rad System would be slow due to heavy load. Please give yourself plenty of time to complete submission of proposal.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Items | Check point |  |
|  | Input of general information on the applicant to e-Rad | All necessary information is provided. | □ |
| Form 1 | Information on the applicant | All necessary information is provided.  Information is matched with e-Rad data. | □ |
| Form 2 | Outline of Research Project |  | □ |
| Form 3 | Project Description | Form 3 must fit in 6 A4 sheets | □ |
| Form 4 | Research Project Organization 1 | All necessary information is given (Particularly, effort is provided). | □ |
| Form 5 | Research Project Organization 2 | All necessary information is given (Particularly, Institution Code, Researcher ID No. and effort are provided). | □ |
| Form 6 | Budget Plan | Total Sum is matched with the research budget given in Form 1. | □ |
| Form 7 | List of Publication (of Research Director) | Form 7 must fit in 2 A4 sheets | □ |
| Form 8 | List of Publication  (Main Research Collaborator(s)) | Form 8 must fit in 1 A4 sheet per Main Research Collaborator. | □ |
| Form 9 | Patent List (Research Director, Main Research Collaborator(s)) | Form 9 must fit in 1 or 2 A4 sheet(s) | □ |
| Form 10 | Information on Other Supports |  | □ |
| Form 11 | Protection of Human Rights and Compliance with Laws and Regulations |  | □ |
| Form 12 | Additional Statement | Form 12 must fit in 2 A4 sheets | □ |

Please apply the proposal after checking all necessary information is provided. Imperfect proposal might be not accepted.

Save Form 1 to 12 in one MS Word or PDF file with less than 3 MB size and upload via e-Rad.

**Relationship with Research Supervisor (and Deputy Research Supervisor)**

Please be sure that the relationship between the applicant and research supervisor does NOT match any of the following situations. Please contact us in advance if you have any doubts.

Inquiry Form: <http://senryaku.jst.go.jp/teian.html> Contact: [rp-info@jst.go.jp](mailto:rp-info@jst.go.jp)

|  |  |  |
| --- | --- | --- |
| Items | Situations |  |
| a | Research Supervisor is a relative of the applicant. | □ |
| b | Research Supervisor and the applicant belong to the same minimum unit of an organization such as the same laboratory at a university or Research Institution including a national institute, or the same corporation. | □ |
| c | Research Supervisor and the applicant are currently conducting close collaborative research or have conducted close collaborative research within the past 5 years. (For example, Research Supervisor and the applicant are regarded to be in the same research group such as in cases where they participate in a collaborative project, jointly write research papers, or conduct research with the same objective, or in cases where they share the same research subject.) | □ |
| d | Research Supervisor and the applicant have had close supervisory relationships, or direct employment relationships, for totaling 10 years or more. A “close supervisory relationship” is considered to be one in which both individuals are affiliated with the same research laboratory. Periods in which Research Supervisor gives substantial guidance to the applicant, even if they belong to different laboratories, are also included. | □ |

Instruction for research proposal preparation



(CREST-Form 1) **FY 2013 Application CREST Research Proposals**

|  |  |  |
| --- | --- | --- |
| Research Area | Select the Research Area you wish to submit the proposal. | |
| Title of proposed research project | The title of the project must be brief with approximately 10 words, scientifically or technically valid, intelligible to a scientifically or technically literate reader, and suitable for use in the public press. | |
| Name of Research Director | The applicant’s name (Last, First) | |
| Affiliated Institution, Section, Title | Name of research institution where the applicant belongs and will carry out the proposed research project. Do not abbreviate. | |
| Researcher ID No. | Enter ID number provided by Grant-in-Aid for Scientific Research <Kakenhi ID>. For those who do not have this ID number, enter the 8-digit “e-Rad” login ID which is provided by registering researcher information on the e-Rad system. | |
| Academic Background | List the applicant’s undergraduate and graduate education as indicated below:  Year: Undergraduate Institution, Major Degree, Supervisor  Year: Graduate Institution, Major Degree, Supervisor | |
| Professional Appointments | List, in chronological order, all academic/professional appointments of the applicant finishing with the current appointment. Include the name of a project leader or a supervisor who had/has been at a mentoring position for the given appointment. | |
| Research Period | Enter beginning and ending time periods (month and year) of the proposed research project. The beginning period of the awarded projects is October, 2013 or later.  Oct., 2013 – [mm. yy] | |
| Total Research Budget | Total Budget: \_\_\_\_\_\_\_\_\_\_ million yen | |
| Eligibility regarding the relationship with the Research Supervisor (and Deputy Research Supervisor) | □ I am eligible | Please be sure that the relationship between the applicant and research supervisor (and deputy research supervisor) does NOT match any of the situations listed in Proposal Preparation Checklist a to d. |

(CREST-Form 2)

- **Proposed Research Area**

Only one application may be submitted across all the Research Areas in CREST and PRESTO.

- **Researcher ID No.**

Proposals must be submitted via the e-Rad system. Those who do not have Kakenhi ID or e-Rad login ID should contact their affiliated Research Institution personnel or the e-Rad Helpdesk immediately to obtain the e-Rad ID. See Chapter 8 in this guideline.

- **Academic Background & Professional Appointments**

Make sure to list the names of the supervisor / the head of the affiliated research laboratory.

- **Research period**

The ending time period of research projects can be set to an arbitrary date prior to March 31, 2019 (default).

**Outline of Research Project**

**○ Outline of Research Project**

Summarize the proposed research project described in “Project Description” (CREST-Form 3) in approximately 200 words.

* **References**

Provide the names of two (2) individuals who have good knowledge of your Research Project (non-Japanese person(s) are acceptable). Provide names of the reference person, institution and contact information (phone/fax numbers and e-mail address). The evaluators (Research Supervisor and Research Area Advisors) may contact them regarding the research proposal during the screening process. Providing this reference information is not mandatory.

(CREST-Form 3)

**Project Description**

- State clearly the work to be undertaken. Graphics and tables may be included in the Form 3 if necessary. However, the file size of this Research Proposal application form must be 3MB or less.

- The Form 3 may not exceed 6 pages.

- Font size is restricted to no smaller than 11-point

* In the Project Description, please refer the description listed in Form 7 and 8.

**1. Target and Objectives**

Describe specifically:

- Objectives and goals of the proposed research project (expected achievements), and

- Significance in terms of the impact on the advancement of science and technology, potential benefits to society and creation of innovation resulting directly from above mentioned achievement.

**2.** **Background**

Describe scientific and technological needs, social demand and requests from economic and industrial interests, including the trends of the related fields to illustrate the importance and necessity of the proposed research project.

**3.** **Research Plans and Approach**

Describe the plans of the proposed research project.

- Show the outline of the time schedule to demonstrate your vision and plan specifically, how to attain "1. Target and Objectives ", while indicating milestones of research toward "1. Target and Objectives." Also, show clearly the goal to be achieved after 3 years from research start. This is one of the evaluation basis.

- Include probable challenges in accomplishing the objectives and goals and solutions for them.

- Questions and their solutions likely to be addressed for the achievement of "1. Target and Objectives." should be contained.

- It is possible to describe them per every research subject.

- Strategy to acquire intellectual property rights. Describe relevant intellectual property rights that the proposers own.

(Continued on the next page)(CREST-Form 3 cont.)

(Continued from the previous page)

**4.** **Research infrastructure and preparation**

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 your own research efforts (and those of other research participants, if necessary)

- Other preliminary knowledge, data, etc. (if any)

### - Measures taken to the item “d” in “2.2.7 Selection Perspective”

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

Take into account the situation and trends of research in relevant fields, present originality and novelty of the proposed research project, and its advantages over others.

**６．Future Prospect of Research**

Describe expected creation of science and technology innovation, creation of new industry, acquirement and enforcement of intellectual properties, contribution to society, etc., which are likely realized in the future, by success of the achievement of the “1. Target and Objectives” in the Project Description

.

(CREST-Form 4)

**Research Project Organization 1**

(Research framework at Research Director’s Group)

**Research Director’s Group (example)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Research Institution** | *Department of Physics, Graduate School of Science, University of JST* | | |
| **Participants from the Research Institution** | **Name** | **Title** | **Effort**  **(Research Director only)** |
| (Research Director →) | *John Smith* | *Professor* | 30% |
|  | *Taro Yamada* | *Assistant Professor* | - |
|  | *TBA (2)* | *Postdoctoral researcher* | - |

- “Effort” indicates the percentage of time required by a researcher to engage in the research when his/her total annual work hours is 100%. “Total work hours” refers to the overall substantial work time including education, medical care and other activities and not only the time spent for research activities. (According to the definition set by Council for Science and Technology Policy)

- Give sufficient consideration to the roles played by the members of your Research Team.

- Researchers who plan to participate but have not decided by the time of application (e.g., postdoctoral researchers to be employed) may be indicated as ”TBA” with the number of participants at that position.

- Add rows to the list of research participants if necessary.

**Note**

- When special duties (managerial positions, such as the dean, chairperson of an academic society, etc.) take working hours (effort), explain the situation and reason.

**Research subjects and overview**

* + **Title of research subjects in charge**
  + **Overview**

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.

(CREST-Form 5)

**Research Project Organization 2**

(Research framework at the Collaborative Research Group）

- If participants belong to the institution other than the Research Director’s, list the participants per each institution and organize a collaborative research group.

- The collaborative research groups from various institutions such as industries, governments, and academia can be included in Research Director’s team.

- Although there is no maximum limit of the number of the collaborative research groups, compose a necessary and sufficient number of groups for execution of Research Director’s research idea. If Research Director does not play a leading role, or if assigned tasks of the collaborative research groups are not clear, the framework of team is inappropriate.

- If necessary, add Form 5 .

- It is not mandatory to have collaborative research groups to the research team.

- Describe measures taken to the item “d” in “2.2.7 Selection Perspective”

**Collaborative Research Group (1)**

**(Example)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Collaborative Research Institution** | Center for Advanced Nanotechnology, Senryaku National Laboratory (Institution No. 1)) | | |
| **Participants from the Research Institution** | **Name** | **Title** | **Effort**  **(Main Research Collaborator only)** |
| (Main Research Collaborator →) | Jane Doe  (Researcher ID No. 2)) | Chief Scientist | 20 % |
| Ichiro Suzuki3) | Researcher | – |

1) Main Research Collaborators shall write in Institution No. of the e-Rad system, if any.

2) Main Research Collaborators shall write in ID number provided by Grant-in-Aid for Scientific Research <Kakenhi> or the e-Rad system, if any.

3) Add rows to list participants if necessary.

**Research subjects and overview**

* + **Title of research subjects in charge**
  + **Overview**

Describe briefly an overview of the research subjects that this collaborative research group will be in charge of.

* + **Role in the entire research project and necessity**

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

(Continued on the next page)

(CREST-Form 5 cont.)

(Continued from the previous page)

**Collaborative Research Group (2)**

(Example)

|  |  |  |  |
| --- | --- | --- | --- |
| **Collaborative Research Institution** | Central Research Laboratory, KISOKEN Ltd.  (Institution No. 1)) | | |
| **Participants from the Research Institution** | **Name** | **Title** | **Effort**  **Main Research Collaborator only** |
| (Main Research Collaborator →) | Joe Bloggs  (Researcher No. 2)) | Senior Researcher | 15 % |
| Erika Mustermann3) | Researcher | – |

1) Main Research Collaborators shall write in Institution No. of the e-Rad system, if any.

2) Main Research Collaborators shall write in ID number provided by Grant-in-Aid for Scientific Research <Kakenhi> or the e-Rad system, if any.

3) Add rows to list participants if necessary.

**Research subjects and overview**

* + **Title of research subjects in charge**
  + **Overview**

Describe briefly an overview of the research subjects that this collaborative research group will be in charge of.

* + **Role in the entire research project and necessity**

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

(CREST-Form 6)

**Budget Plan**

- 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.

- 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 collaborative research groups, and cost performance will be an important consideration as a part of the selection process.

- Describe measures taken to the item “d” in “2.2.7 Selection Perspective”

**Research Budget plan by item (entire team)**

**(Example)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1st Year**  (2013.10  -2014.3) | **2nd Year**  (2014.4  -2015.3) | **3rd Year**  (2015.4  -2016.3) | **4th Year**  (2016.4-  2017.3) | **5th Year** (2017.4-  2018.3) | **Final Year**  (2018.4-  2019.3) | **Total**  (Million Yen) |
| **Equipment** | 30 | 40 | 40 | 10 | 10 | 0 | 130 |
| **Materials /Consumables** | 5 | 10 | 10 | 10 | 8 | 4 | 47 |
| **Travel** | 3 | 5 | 5 | 5 | 5 | 5 | 28 |
| **Personnel and Services (Number of Researchers)** | 5  （3） | 10  （3） | 20  （5） | 20  （5） | 10  （3） | 10  （3） | 75 |
| **Other** | 2 | 10 | 10 | 10 | 7 | 7 | 46 |
| **Total**（Million Yen） | 45 | 75 | 85 | 55 | 40 | 26 | 326 |

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 Research Director or participants.

Personnel and Services: Personnel expenses and compensation for postdoctoral researchers, technicians, research assistants(RA\*), etc.

\*As for RA, please refer to “2.3.3 Research Costs”.

(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.)

**Note**

- When “Personnel and Services” exceeds 50% of the total budget, or when either of “Material/ Consumables” or “Travel” exceeds 30%, justify it by providing detailed cost estimation and additional information herein.

- If the total requested budget exceeds 500 million yen, describe the "needs for large budget” herein.

(Continued on the next page)

(CREST-Form 6 cont.)

(Continued from the previous page)

**Research Budget plan by group**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1st Year**  (2013.10  -2014.3) | **2nd Year**  (2014.4  -2015.3) | **3rd Year**  (2015.4  -2016.3) | **4th Year**  (2016.4-  2017.3) | **5th Year** (2017.4-  2018.3) | **Final Year**  (2018.4-  2019.3) | **Total**  (Million Yen) |
| **Research Director Group** | 25 | 35 | 40 | 35 | 20 | 16 | 171 |
| **Collaborating Research Group (1)** | 10 | 20 | 25 | 10 | 10 | 5 | 80 |
| **Collaborating**  **Research Group (2)** | 10 | 20 | 20 | 10 | 10 | 5 | 75 |
| **Total**（Million Yen） | 45 | 75 | 85 | 55 | 40 | 26 | 326 |

**List of major equipment costing 5 million yen or more (item, estimated cost）**

(Example)

XXXXXX 15 M Yen (Million Yen)

XXXXXX 5 M Yen

XXXXXX 10 M Yen

XXXXXX 5 M Yen

XXXXXX 10 M Yen

XXXXXX 5 M Yen

(CREST-Form 7)

**List of Publication (of Research Director)**

List “Major publication” and “Other reference publication” within 10 papers for each.

* **Major publication**

List author(s) (all authors), title, title of journal/book, volume and page numbers, and published year.

Refer appropriately in the Form 3.

* **Other reference publication**

In addition to the above, list any relevant and recent publications that helps understanding the proposed research project or that represent Research Director’s research work. (Place an asterisk (\*) at the beginning of the title of the papers / books of which the Research Director is the first author (if any)).

List author(s) (all authors), title, title of journal/book, volume and page numbers, and published year.

* **Results of Post Evaluations of Research Project served as Principal Investigator of competitive research funding programs and so on ( only those which were open to public after FY2009.)**

(CREST-Form 8)

Names of competitive research funding programs and so on, name of research projects and URLs of Post Evaluations

**List of Publication**

**(Main Research Collaborator(s))**

List selected publications of the Main Research Collaborator, in reverse-chronological order, which are mainly considered to be relevant to the proposed research project and published in recent years.

List author(s) (all authors), title, title of journal/book, volume and page numbers, and published year.

Do not exceed 10 papers for each Main Research Collaborator.

(CREST-Form 9)

**Patent list**

**(Research Director and Main Research Collaborator(s))**

* **Major patents**

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

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

* + **Research Director**
  + **Main Research Collaborator(s)**

(CREST-Form 10)

**Information on Other Supports**

List grants from the government competitive research funds and any other research subsidies (including CREST and PRESTO) that the Research Director and/or Main Research Collaborators are currently receiving, applying for, or planning to apply for by program name, indicating the title of project, research period, roles, amount of annual budget, and effort. Your entitlement to the JST funds may be cancelled at a later date even if you have been selected should your presentation fail to be accurate.

**(Note)**

**- Please refer Chapter 6 in this guideline about “Unreasonable Duplication and Excessive Concentration”.**

**- Contact JST (rp-info@jst.go.jp) at any time during the selection process, if any information provided in this form has changed for any reason, including, for example, that a listed research fund being applied for has been granted.**

**- In case of proceeding to the interview, proposal, research plan and so on of other supports might be required.**

**(Example)**

**Research Director (Proposer):** **Name: \_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Program 1)** | **Status2)** | **Title of Project**  **（Name of principal investigator）** | **Research Period** | **Role3)**  **(Principal Investigator or co-Principal Investigator)** | **(1) Allocated Budget4)**  **(For entire period)**  **(2) FY 2014 (planned)**  **(3) FY 2013(planned)**  **(4) FY 2012** | **Effort**  **(％)5)** |
| Grants-in-Aid for Scientific Research, Fundamental research (S) | Awarded | XXXXXXXX | 2010.4 -  2014.3 | PI | (1) 100 M yen  (2) 25 M yen  (3) 25 M yen  (4) 5 M yen | 20 |
| **7)** |  |  |  |  | (1)  (2)  (3) －  (4) － | - |

1. List grants that the proposer is currently receiving, or selected, in descending order of amount of allocated budget (for the entire period). Then list those the proposer is currently applying for or planning to apply for (specify "submitted" or “preparing” in the column "Program").
2. Type “Awarded” if it is currently awarded or decided to be awarded, and type “Submitted” for other status.

3) Describe directorship or allocated work as "Role."

4) Enter the amount of allocated budget (direct cost)."

5) Enter "Effort" value of “Awarded” grants. Describe effort for grants the proposer is currently receiving assuming that the CREST proposal is selected.

6) **-“Effort” indicates the percentage of time required by a researcher to engage in the research when his/her total annual work hours is 100%. “Total work hours” refers to the overall substantial work time including education, medical care and other activities and not only the time spent for research activities. (According to the definition set by Council for Science and Technology Policy). Do not enter efforts of the programs applying for, or planning to apply for. Enter only the efforts which is receiving or planning to receive on the assumption that only the CREST program is selected.**

7) Add rows if needed.

(Continued on the next page)

(CREST-Form 10 cont.)

(Continued from the previous page)

**Main Research Collaborator (1):** **Name: \_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Program 1)** | **Status2)** | **Title of Project**  **（Name of principal investigator）** | **Research Period** | **Role3)**  **(Principal Investigator or co-Principal Investigator)** | **(1) Allocated Budget4)**  **(For entire period)**  **(2) FY 2014 (planned)**  **(3) FY 2013 (planned)**  **(4) FY 2012** | **Effort**  **(％)5)** |
| Health and Labuor Sciences Research Grants | Awarded | XXXXXXXX | 2011.4 -  2014.3 | PI | (1) 50 M yen  (2) 20 M yen  (3) 20 M yen  (4) 5 M yen | 10 |
|  |  |  |  |  | (1)  (2)  (3)  (4) |  |
|  |  |  |  |  |  |  |

**Main Research Collaborator (2):** **Name: \_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Program 1)** | **Status2)** | **Title of Project**  **（Name of principal investigator）** | **Research Period**  **(fiscal year)** | **Role3)**  **(Principal Investigator or co-Principal Investigator)** | **(1) Allocated Budget4)**  **(For entire period)**  **(2) FY 2014 (planned)**  **(3) FY 2013 (planned)**  **(4) FY 2012** | **Effort**  **(％)5)** |
|  |  |  |  |  | (1)  (2)  (3)  (4) |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

(CREST-Form 11)

**Protection of Human Rights and Compliance with Laws and Regulations**

* Describe the measures and actions that you will take if your research involves compliance with the related laws and regulations (e.g. research requiring the consent and the cooperation of the other party when implementing the research plan, research requiring consideration for the handling of personal information and research requiring efforts regarding bioethics and safety measures).
* This applies to surveys, research, experiments which require an approval procedure in an ethics committee inside and outside the research institution, such as for example questionnaire surveys in which personal information is involved, interview surveys, the use of provided samples, analysis study of the human genome, recombinant DNA experiments, experiments on animals, etc.
* Please indicate where this is not applicable.

(CREST-Form 12)

**Additional Statement**

- State the reason(s) why you have applied for CREST, any requests concerning your research, or any other concerns that you might have.

- In case this proposal is the second or the third one to the same research area, please state points of difference from the previous proposal.

- If participation of overseas collaborative research group(s) is planned, describe reasons and necessities.

- List any outstanding record of awards here. (Optional)

- Do not exceed two pages for this section.