# FY 2022 Application ACT-X Research Proposal

(ACT-X - Form 1)

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| --- | --- |
| Research Area | **Hardware in Future for Resilience of Real Space** |
| 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 Applicant |  |
| Date of birth, age, and gender | Month, Day, Year (Age: as of April 1st, 2022) male / female |
| 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).*  *For students, enter the master's / doctoral school year in addition to the department.* |
| Academic Background |  |
| Professional Appointments and Awards |  |
| Information of Applicant | URL:  ***Notes: Delete this textbox of notes in submission.***   * ***To describe the Form 1 to 7, please follow the “Instructions for Preparing a Proposal”. Fill in form 1 on one page of A4-size sheet (no exceptions).*** * ***Please delete the notes in italics (slanting characters) in this and other forms.*** * ***In case that information entered in e-Rad is different from that in research proposal documents, that in this research proposal will be considered correct. Moreover, Pay attention to the unit of budget as Thousand Yen.*** * ***Research proposals need to be converted to PDF format before being uploaded to e-Rad. Please use the PDF conversion function of e-Rad for conversion.*** |
| Research period | From October 2022 to [Month Year] ([xx] years) |
| Total Research Budget | Total Budget: 　　　 thousand yen  (Please assume even maximum less than 10,000,000 yen.) |
| Site for conducting research (planned site entered in the contract with JST) | □affiliation above (If more than one, please list one)  □other ( ) |

Research Proposal Overview

(ACT-X - Form 2-1)

## Outline

*・In Form 2-1, Provide an overall description of the research proposal in within two 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 4).*

(ACT-X – Form 2-2)

# Major Achievements of the Applicant

## 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.*

**(1) List of principal research papers（within 5 papers）**

**(2) List of principal invited lectures（within 5 lectures）**

**(3) Other achievements（within 5 achievements）**

(ACT-X –Form 3-1)

# Project Description

*・Clearly state the work to be undertaken. Figures and tables (in color) may be included if necessary.*

*・For Form 3-1, do not exceed three 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 4 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

## 2．Target of proposed research project (within 60words)

## 3．Research Plans and Approach

*If the total budget (direct expenses) exceeds 6,000,000 yen, please briefly describe the reason. Please assume even maximum less than 10,000,000 yen.*

*\* The standard amount of research expenses (direct expenses) is set for each area. Please refer to Chapter 6 "Policy of Research Areas Calling for Proposals" in the application guidelines.*

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

## 5．Future Prospect of Research

*Describe what new value you are aiming to create with this research proposal, and what kind of future you are planning to open up.*

(ACT-X – Form 3-2)

# Research Schedule

*\*In Form3-2, describe on one page of A4-size sheet (no exceptions). If this instruction is not followed, the research proposal might not be accepted.*

*\*Enter the schedule of the proposed research project.*

*(The following is an example of 2.5 years research period.)*

*\*If proposed project consists of several research subthemes, state clearly schedules of each subtheme.*

*\*Length, position and thickness of arrows can be changed.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Research Subjects | 2022  Fiscal year  (6 months) | | 2023  Fiscal Year | | 2024  Fiscal Year | |
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| **3.** |  |  |  |  |  |  |
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(ACT-X – Form 4)

# List of Achievements/Ex-Post Evaluation Results

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

## 1．Principal papers, books, and other publications

## 2．Research papers/publications other than the above

## Major Patent

*[describe the below]*

* *Submission No, Inventors Name, Title, Affiliation, Submission Date*

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

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

# Information on Other Supports

(ACT-X – Form 5)

[Notes]

* Enter the research project, research period, role, amount of research funds received, and effort for each research project concerning competitive national 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) from which the applicant is receiving funds or for which an application is being or is planned to be made. Also see application guideline “Chapter 8.1 Measures against Unreasonable Duplication and Excessive Concentration” and “Chapter 9 Limitations on the Multiple Application within the Strategic Basic Research Programs.” In the case that it is difficult to enter due to unavoidable circumstances such as being unable to enter based on the contents of the confidentiality agreement that has already been concluded, it is possible to submit this research proposal without filling in any items other than effort. Please noted that this information will be provided to the reviewers at the time of proposal selection.
* If the information entered in the research proposal differs from reality, the research project may be rejected.
* JST may ask for application and plan documents submitted to other systems when a proposal reaches the interview stage.
* Enter this proposed ACT-X theme first row, followed by other research themes in a descending order of the amount of research funds (for the whole period, direct expenses only) the applicant receives.
* Add rows if needed.

*If a student uses the supervisor's e-Rad ID and describes that the effort rate is 1% on the e-Rad, fill out this proposal form with the actual effort ratio (eg, 50%). In the case that a student is an applicant, describe the percentage of time spent for ACT-X research in 40 hours per week as "effort".*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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 2022 (planned)**  **(3) FY 2021 (actual)**  **（Thousand yen/unit）** | **FY2022**  **Effort**  **(％)** |
| - | ACT-X  (This application) | Sub-mitted | *Enter the effort ratio data in the right box. 🡪 🡪 🡪* | | | |  |
| (1) |  |  |  | － |  | (1)  (2)  (3) |  |
| (2) |  |  |  | － |  | (1)  (2)  (3) |  |
| (3) |  |  |  | － |  | (1)  (2)  (3) |  |

(ACT-X – Form 6)

# Protection of Human Rights and Compliance with Laws and Regulations

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.

(ACT-X – Form 7)

# Other Special Remarks

*\*In Form 7, Provide an overall description of other special remarks on two pages or less of 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.*

## Conflict of interest between the applicant and evaluators

(Item 1) Conflict of interest with research supervisor: 　☐YES　　☐NO

If YES, state the reason

(Example) The research applicant conducted joint research with the research supervisor on ○○project

(20xx-20xx). It comes under condition (f) for conflict of interest stipulated in 5.1.2(2).

(Item 2) Conflict of interest with research area advisor(s): 　☐YES　　☐NO

If YES,

-Describe the name of research area advisor with conflict of interest: (The Advisor’s Name)

-State the reason

(Example) The research applicant is conducting joint research with the advisor in \*\* project.

It comes under conditions (c) for conflict of interest stipulated for 5.1.2(2).

## Investment to the affiliated Institution from JST

*Please be sure to refer to the procedure for filling out the proposal.*

Current investment by JST: 　☐YES　　☐NO (If Yes, please write down the detail.)

The name of Institution: XXXXXX (president: YYYYYY)

## (Only for those relevant) Special notes for efforts by an applicant

* Whether or not the research proposer needs work hours (effort) for special tasks (specific on-campus / in-house work, etc.)

## Other special remarks:

## Differences from the previous application (in case of applications that have been made to the research area two times or more),

## Plan of change of research institute affiliation, other special notes

# Proposal Preparation Checklist

(ACT-X – Attachment)

***※This checklist should be deleted in submission※***

|  |  |  |  |
| --- | --- | --- | --- |
| Check | | Reference Material | Check |
| Have you completed e-Rad researcher registration? | | Chapter 10 | □ |
| Have you completed the educational program on research integrity? | | Section 8.31 | □ |
| Have you confirmed not to violate the conflicts on multiple applications limitations (incl. AMED program)?  ※A scope of the multiple applications limitation has been updated from 2022. | | Section 9 | □ |
|  | |  |  |
| Conflict of interests with the Research Supervisor\* | | Section 5.1.1 |  |
| A | The research project applicant is a relative of the Research Supervisor. | | No □ |
| B | The research project applicant and the Research Supervisor are both affiliated with the same smallest organizational unit (e.g. same research lab) of a university, national or other national government-funded research and experiment institution. Or, the research project applicant and the Research Supervisor are affiliated with the same company. | | No □ |
| C | The research project applicant and the Research Supervisor are presently working in close cooperation on the same joint research project. Or, have done so within the past three years.  (Existence of close cooperation will be judged by the facts that, for example, the research project applicant and the Research Supervisor are working together on the same research project, are performing different parts of the same research project, or are co-authors of a research paper. If you have any questions, please contact JST) | | No □ |
|  |  | |  |

**\***When it is unclear whether any of the above conditions apply, please download and fill the Inquiry Form via the following URL: http://www.jst.go.jp/kisoken/boshuu/teian/koubo/inquiry\_en.docx

Please send it via email to [rp-info@jst.go.jp](mailto:rp-info@jst.go.jp).

**○ Deadline for Submission**

Immediately before the deadline, e-Rad may suffer high system burden. As a result, the application may take a long time, and troubles, including the failure to complete the application, may occur. Try to complete the application well in advance.

**○Forms**

Check the proposal documents for possible omissions before submission. A proposal application may not be accepted if relevant forms have been filled out incorrectly. Also, when converting to PDF format, please use the PDF conversion function of e-Rad.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Item | Main Check Point | Check Column |
|  | Input of general information on the applicant to e-Rad | All necessary information is provided. File size should not exceed 3MB in total in PDF format. | □ |
| Form 1 | Cover of research proposal documents | All necessary information is provided.  Information is matched with e-Rad data.  The form 1 is within one page when converted PDF | □ |
| Form 2-1 | Research Proposal Overview | When converted to PDF format, the form 2-1 is no more than two pages long? 10.5 point or larger font? | □ |
| Form 2-2 | Major Achievements of the Applicant | The form 2-2 is within one page when converted PDF | □ |
| Form 3-1 | Project Description | The form 3-1 is within six pages when converted PDF.  10.5 point or larger font? | □ |
| Form 3-2 | Research schedule | The form 3-2 is within one page when converted PDF. | □ |
| Form 4 | List of Achievements / Ex-Post Evaluation Results | All necessary information is included with following the “Instruction for Preparing a Proposal”. | □ |
| Form 5 | Information on Other Supports | All necessary information is included. Effort for this research proposal is filled in. | □ |
| Form 6 | Protection of Human Rights and Compliance with Laws and Regulations | The column is already checked. | □ |
| Form 7 | Other Special Remarks | The form 7 is within two pages when converted PDF. | □ |
| Memorandum of Confirmation | Required only if you are not in a position to execute research funds, such as a student or JSPS Research Fellow, and cannot become a contracting party. | Did the applicant and supervisor agree on the items on the memorandum of confirmation and convert to PDF? | □ |