



October 21, 2021

Public Call for Research Proposals:
ICRR's FY2022 Inter-University Research Program

We publicly invite the submission of research proposals for ICRR's Fiscal 2022 (from April 1, 2022, to March 31, 2023) Inter-University Research Program. Those wishing to conduct collaborative researches are kindly requested to apply through the Inter-University Research Program Web application system of Institute for Cosmic Ray Research of the University of Tokyo (hereinafter referred to as the "Web system") by Friday, January 7, 2022 at 5 pm (JST).

●Inter-University Research Program Web application system of Institute for Cosmic Ray Research, the University of Tokyo: <http://www.icrr.u-tokyo.ac.jp/en/collaborators-2/>

The total budget for Inter-University Research Program expenditure for 2021 was 43.3 million yen, and a total of 161 proposals were selected.

Please note that if your submitted research proposal is selected, it will be handled in accordance with the Regulations on Collaborators at the Institute for Cosmic Ray Research of the University of Tokyo.

Prof.Dr. Takaaki KAJITA

Director, Institute for Cosmic Ray Research
The University of Tokyo



INSTITUTE FOR COSMIC RAY RESEARCH
THE UNIVERSITY OF TOKYO

Inter-University Research Program Application Guidelines (International)
for the University of Tokyo, Institute for Cosmic Ray Research (ICRR)

1. Purpose of Public Invitations for Applications

The purpose of public invitations for applications from researchers is to invite them to conduct observations and research on cosmic rays and related topics in the broad sense together with ICRR.

2. Application Items

A) We publicly invite Inter-University Research Program proposals for research on cosmic rays in the broad sense and on elementary particles or astrophysics to be conducted jointly with ICRR. The Research themes should involve the joint use of facilities and equipment belonging to ICRR including:

- Norikura Observatory
- Akeno Observatory
- Kamioka Observatory
- Research Center for Cosmic Neutrinos
- KAGRA Observatory
- High Energy Astrophysics facility in Canarias
- Kashiwa Low-Level Radioisotope Measurement Facility
- ICRR's computer system is used jointly by all research divisions.

Any research topics involving the facilities above and related to the research themes listed below will be considered.

B) Research Topics

- a) Cosmic ray research conducted underground or in deep sea
- b) Research on high-energy cosmic rays in the broad sense carried out using satellite and/or balloon, and/or on high mountains and/or other above-ground locations
- c) Research focused on detection and observation of sources of high-energy cosmic gamma rays
- d) Research on the origins of cosmic rays or interstellar matter and cosmic dust by chemical composition analysis, isotope measurement, and other means
- e) Experimental research on existing detectors involved in cosmic rays in the broad sense
- f) Research and the development of observation methods and equipment useful for the study of cosmic rays in the broad sense
- g) Theoretical or exploratory research on themes in the study of cosmic rays in the broad sense that are expected to become prominent in the future

C) Scientific Meetings

These meetings bring researchers together at ICRR over a period of about 1–3 days to discuss specific themes of particular interest in cosmic ray research in the broad sense.

*Travel expenses are limited to domestic travel in Japan to ICRR and its research facilities and observatories.

*Goods are limited to those purchased in Japan and used in Japanese institutions or ICRR facilities overseas.

*We also accept research proposals limited to the use of facilities only. (See page 4, Notes on applications 5)

3. Eligibility

Researchers (including postdoctoral fellows etc.) of universities and national or other public research institutions. However, Principal Investigators must be full-time employees and able to take full responsibility for conducting independent research. Postdoctoral researcher applying as a Principal Investigator must enter the following items (1) and (2) in Form 3 "Confirmation Form for Inter-University Research Program applications for which a postdoctoral fellow is the Principal Investigator" and obtain the approval of the Inter-University Research Program Selection Committee.

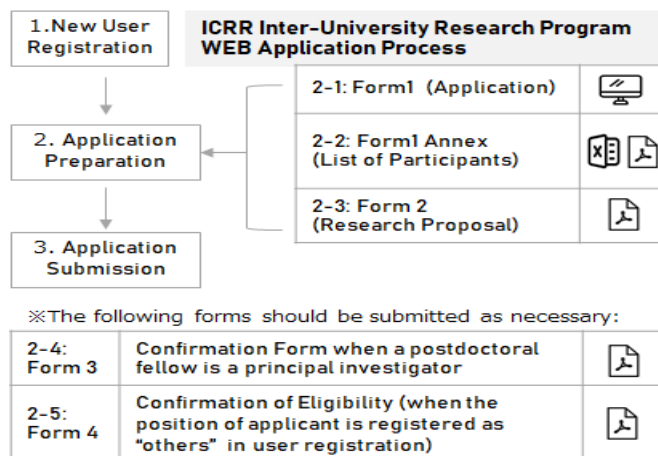
- (1) Effort (percentage) when the research proposal is selected
- (2) Consent of superior (the provider of employment funds)

Note that undergraduate students can participate only as research assistants.

4. Application Procedure

Submit your application documents through the Web application system of Institute for Cosmic Ray Research, the University of Tokyo (<http://www.icrr.u-tokyo.ac.jp/en/collaborators-2/>).

The diagram on the right shows the application process (please note that Form 7 “Letter of Consent” is no longer required). For details, please refer to the user manual of ICRR web application system that is available on ICRR webpage.



5. Application Deadline: 5 PM (JST), January 7 (Fri), 2022

*Application documents received after the deadline will NOT be accepted.

6. Contact

- (1) Inquiries regarding application submission and procedure

Inter-University Research Program Administrator, Institute for Cosmic Ray Research, the University of Tokyo
5-1-5 Kashiwanoha, Kashiwa-shi, Chiba, 277-8582, Japan

Email: kyodo-riyo_at_icrr.u-tokyo.ac.jp

(replace _at_ with @ when sending emails)

- (2) Inquiries regarding research and technical matters

The Head of the research division to which you are applying or the Director of the facility that you wish to use (refer to the list of contacts provided on the last page).

7. Screening

The Inter-University Research Program Selection Committee screens research proposals for selection or rejection and assesses required expenses based on the information provided in the submitted files, with the final decision being taken by the Advisory Committee.

8. Timing of Selection Decision

Scheduled for late April.

The names of selected research proposals and Principal Investigators (including applicant’s organization) will be published on the ICRR website.

9. Reporting Research Results

- (1) After the end of the relevant fiscal year, the Principal Investigator should promptly submit Form 8 (Report of Research Results) within two pages to the web system. Since the Research Result Reports are published as is on the ICRR website, they should be concise and clear. ICRR also holds a meeting for presentation of research results before the end of the relevant fiscal year (remote attendance to the concerning meeting will be allowed in case of absence in Japan at that time). Note that the content of these presentations will be used as a reference when assessing applications for the following fiscal year.

(2) When publishing papers on the results of collaborative research, you should clearly state in the Acknowledgments that the research was supported by ICRR's Inter-University Research Program. (Article 7 in the Regulations on Collaborators at the Institute for Cosmic Ray Research of the University of Tokyo)

The following is an example of acknowledgment for your reference. *() is optional.

• This work was (partially) supported by the Inter-University Research Program of Institute for Cosmic Ray Research (ICRR), the University of Tokyo.

10. Safety and Health Education, etc.

Participating researchers and research assistants are required to take safety and health education specified by the facility to be used, and to observe facility director instructions on safety and health. Participating researchers are also required to have accident insurance and liability insurance coverage. Students and those whose institutions do not guarantee accident and liability insurance (e.g., those belonging to foreign research institutions) are recommended to purchase insurances such as "Student Education and Research Accident Insurance" or "Japan Educational Exchange and Services (JEES)'s Supplementary Liability Insurance."

11. Miscellaneous

- A) Applicants should obtain informal consent from the head of their affiliation before applying.
- B) When submitting a new application for the use of a facility, be sure to obtain the consent of the facility director before application.
- C) Human assistance provided for installing and operating observation equipment at Norikura Observatory is limited to a certain period by the snowfall in winter. Therefore consulting the director of the Norikura Observatory is recommended when drafting your research plan.
- D) Refer to Reference 2 on the last page for the details on overseas observatories.
- E) Principal Investigators must have completed the ethics education program provided by their affiliation and/or "eL CoRE" (e-Learning Course on Research Ethics provided by Japan Society for the Promotion of Science) by the time they apply if they plan to claim expenses.
(eL CoRE URL: <https://elcore.jsps.go.jp/top.aspx>, click "English" button on top right to switch the language)
- F) Applications submitted after the application deadline are not accepted in principle. Withdrawing the application for unavoidable reasons after it has been selected will not affect the decision on acceptance of any future applications. We recommend that you apply even if the decision to conduct the research has not been finalized by the application deadline.

Notes on applications for the Inter-University Research Program

0. Notandum

Be sure to use the latest application forms. Form 2 “ Research Proposal” should be two pages or less in length

1. Application Items:

Select applicable items (A, B, C) based on the Application Guidelines. You may choose more than one (especially in the case of an application to research meetings (C)).

2. Research Related Division, Center or Facility Name etc.:

Select the appropriate symbol from page 5 “For your reference: research division/center/facility names etc. (Symbols A-K)”

Form 1 (application form) will be automatically converted to PDF after filling out the web application.

3. Research Proposal:

Provide the title of your research proposal.

4. Expenses Required for Your Research:

If you wish to claim expenses required for your research, provide the total amount and breakdown into goods and other expenses and travel expenses (domestic travel in Japan to ICRR and its research facilities and observatories). We are unable to allocate research expenses for proposals not directly related to cosmic ray research, since such proposals are limited to facility use only. When this rule applies, check the "Confirmations before Submitting Your Proposal" box at the web application's bottom.

You may use the research budget for paying the honorarium. In such a case, prepare a statement of reasons and submit the document to the appropriate ICRR Division Head for permission. The honorarium will be paid from the goods and other expenses category.

Note that Principal Investigators must have completed the ethics education program provided by their affiliation and/or “eL CoRE” (e-Learning Course on Research Ethics provided by Japan Society for the Promotion of Science) by the time they apply if they plan to claim expenses. Select “Completed” in the “Research ethics education” field to confirm that you have completed such a program.

5. Participating researchers and research assistants:

Enter the total combined number of participating researchers and research assistants, and the names of the participants to the web application form in Form 1: Annex (List of participating researchers and research assistants). In principle, no additions on the member list are permitted, but if you wish to make an addition at the confirmation stage after the selection, you should submit Form 6 “Request for permission to add participating researchers and research assistants” for each additional member. “Research assistants” referred in the system correspond to undergraduate students. They are ineligible for travel expenses.

If there is lack of space to list everyone, use as many pages of Form 1: Annex (list of participating researchers and research assistants) as you require. For affiliation, provide the name of the organization to which the person will belong as of April 1, 2022.

You should also provide the emergency contacts of the organization to which participating researchers visiting ICRR or its attached facilities to conduct experiments belong (telephone and e-mail of an administrative office etc. of your organization that can definitely be reached in the event that the research group Principal Investigator or other member of the group meet with an accident or similar contingency.) You should ensure that the system is in place for contacting the person responsible for safety management at your organization through the above

emergency contacts in the event of an emergency. Note that you do not need to fill this field in if visiting ICRR only to attend research meetings etc.

(Note)

* If there are multiple collaborators belonging to the same organization, you only need to fill in the field for the representative of the team.

* Form 4 “Confirmation of Eligibility”: if you choose “others” as your current position, please submit Form 4 to confirm your eligibility.

* Form 7 “Request to Change Institute for Cosmic Ray Research, the Inter-University Research Program Expense Usage Breakdown” should be submitted when the amount of the change exceeds 50% of the assessed research amount.

6. Research Grants (JSPS KAKENHI Grant and others) Acquisition and Application Status:

If you have obtained or applied for other funding such as JSPS KAKENHI Grant or grants from private foundations for research related to this application, be sure to state that fact.

7. If submitting multiple Inter-University Research Program applications as a Principal Investigator, prioritize your research proposals in the web system.

8. As a safety and health rule, you are required to take safety and health education specified by the facility to be used and observe facility director instructions on safety and health. Check the box on the web application as indication that you have understood it.

9. Inter-University Research Consent Form:

Form 5 is Inter-University research consent form for participating researchers. After obtaining required consent and filling in the form, participating researchers should hand it to the Principal Investigator for safekeeping.

10. “Your contact at the Institute for Cosmic Ray Research”

If none of the researchers from ICRR are participating, provide name of the ICRR researcher serving as a contact. If left empty, we will designate an ICRR researcher after selection.

11. Points related to 2022 applications that require special mention

A) The following modifications have taken place for this fiscal year’s application:

- Introduction of the web application system: <http://www.icrr.u-tokyo.ac.jp/en/collaborators-2/>
(For details, please refer to the web application system manual)
- Instead of submitting the Form 7 “Letter of Consent”, check the pledge in the web system
- Signature is no longer required for other additional application forms
- The submission method of the Research Result Report is changed from email attachment to via web system

12. Application Forms

1. **Form 1** (Application): Direct entry to the web application system. It will be automatically converted to PDF after filling out the form
2. **Form 1 Annex** (List of Participants)
3. **Form 2** (Research Proposal)
4. **Form 3** (Confirmation Form for Inter-University Research Program Applications for a Postdoctoral Fellow is the Principal Investigator)
5. **Form 4** (Confirmation of Eligibility)
6. **Form 5** (Inter-University Research Consent Form); which will be kept by the Principal Investigator.
7. **Form 6** (Request for Permission to Add Participating Researchers and Research Assistants)

8. **Form 7** (Request to Change Institute for Cosmic Ray Research Inter-University Research Program Expense Usage breakdown)
 9. **Form 8** (Research Result Report)
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For your reference: Research division/center/facility names etc. (Symbols A-K)

Research applications are handled by the following research divisions, centers, and facilities as required. Your application form will be forwarded to the relevant research division head or center director. When relevant centers/facilities etc. are specified, research division heads will inform center/facility directors etc.

Neutrino and Astroparticle Division

- A Super-Kamiokande (division head)
- B Kamioka facilities other than Super-Kamiokande (division head and Kamioka facility director)

High Energy Cosmic Ray Division

- C Akeno Observatory facility use (division head and Akeno Observatory director)
- D Norikura Observatory facility use (division head and Norikura Observatory director)
- E High Energy Astrophysics facility in Canarias use (division head and High Energy Astrophysics facility in Canarias director)
- F Gamma rays, highest energy cosmic rays, ultra-high energy cosmic rays, high energy astrophysics (division head)

Astrophysics and Gravity Division

- G Gravitational wave-related (division head and KAGRA Observatory facility director, *Kamioka facility director if using Kamioka facilities)
- H Observational cosmology, theory (division heads)

Research Center for Cosmic Neutrinos

- I Primary Cosmic rays, Kashiwa underground facility use (center director)
 - J Computer use (center director and Computer Committee)
 - K Workshops on the future cosmic ray studies
-

Contacts

Division name etc.	Name	Telephone	Email address
Head, Neutrino and Astroparticle Division	Masato Shiozawa	+81-(578)-85-9611	masato@suketto.
Head, High Energy Cosmic Ray Division	Masato Takita	+81-(80)-4860-7998	takita@
Head, Astrophysics and Gravity Division	Masahiro Kawasaki	+81-(80)-4814-1388	kawasaki@
Director, High Energy Astrophysics facility in Canarias	Masahiro Teshima	+81-(80)-4831-8055	mteshima@
Director, KAGRA Observatory	Masatake Ohashi	+81-(578)-85-2343	mohashi@
Director, Research Center for Cosmic Neutrinos	Kimihiro Okumura	+81-(80)-4872-9272	okumura@
Director, Kamioka Observatory	Masayuki Nakahata	+81-(578)-85-9603	nakahata@
Director, Akeno Observatory	Hiroyuki Sagawa	+81-(80)-4808-2374	hsagawa@
Director, Norikura Observatory	Masato Takita	+81-(80)-4860-7998	takita@

*For email addresses, add "icrr.u-tokyo.ac.jp" (without quotes) after the above entries.

*+81 is Japan country code. When making local calls within Japan, delete +81 and add 0 before the area code or the mobile prefix in parenthesis.

2. ICRR's overseas observatories are as follows:

Overseas observatory name	Facility/equipment name
Tibet, China	Air shower detector
Utah, USA	Telescope Array (TA)
Chacaltaya, Bolivia	Chacaltaya Observatory of Cosmic Physics
La Palma, Spain	Cherenkov Telescope Array (CTA) / High Energy Astrophysics facility in Canarias

FY2022 Inter-University Research Program Application Form (International)

2021-10-xx

Research Division/Center/Facility		Division Head	
Facility Director			
Your contact at the Institute for Cosmic Ray Research			

Research Division/Facility

(A) Facility Name	(B) Research Theme	(C) Research Meetings

Director, Institute for Cosmic Ray Research, University of Tokyo

[PLEDGE]	I do solemnly swear that I will adhere to the following conditions
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- Engage in Inter-University Research Program at the Institute for Cosmic Ray Research.
- Deal in good faith with any problems while engaging in Inter-University Research Program at the Institute for Cosmic Ray Research.
- The application must be submitted with the approval of the head of the institution to which the Principal Investigator belongs.

Applicant Information

Name		Telephone Number(s)	
		Email Address	
Postal Code		Address1	
Name of Affiliated Organization		Department	
Position			

Research Proposal Title

New/Ongoing	
Project Period	From 2022-04-01 to 2023-03-31
Research Proposal Title (Japanese)	
Research Proposal Title (English)	
Purpose of Research Describe in approx. 100 words	

Total number of Participants

people

Expenses Required for Your Research

Total Amount for Goods and Other Expenses	Total Amount for Travel Expenses	Grand Total
yen	yen	yen

Details for Goods and Other Expenses

Item	Standard	Quantity	Unit price	Sub total	Grand Total

Travel expenses breakdown

Research Visit Planning					
Name	Itinerary	Number of visits	Length of stay	Sub total	Note
		times	days		

Research Grants (Kakenhi and others) Acquisition and Application Status

Type	Project Name	Project Period	Amount	Research Funding Application

Facilities used

Facility Name	Laboratory name	Electric power requirement	Wh

Other

Rule on Safety and Health Education	I will comply.
I have taken research ethics education.	I have already taken.
Rules for research funding allocation	I have already taken.

reference_number	
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Form 1: Annex (List of participants)

* Include principal investigator.		* Enter total number of participants in Cover. <input type="checkbox"/> principal investigator (= full-time), <input type="checkbox"/> Undergraduate (= research assistant)						
No.	Name	Organization	Department (required even if in University of Tokyo)	Job title (Graduate school students should mark Graduate school student field with O.)	Country in which organization is located	Graduate school student	Emergency contact at the organization. (One required for each organization)	
							Telephone	E-mail
1								

Add rows as required.

Form 2

1. Research purpose (Include urgency and international competitiveness.)

2-1. Fiscal 2022 research plan and concrete method (Clearly state relevance to ICRR.)

2-2. Plan for fiscal 2023 and onwards

Reference No.

Institute for Cosmic Ray Research, University of Tokyo

3-1. Proposals related to this research plan that have been selected for the Inter-University Research Program over the past three years, together with allocated funds and lead researchers

3-2. Previous results and anticipated outcomes

(For **new research** projects, provide details of preparations to date and research results.
For **ongoing research**, report below on the results of your research for fiscal 2021.)

3-3. Recent published papers (May include presentations at academic conferences.)

4. Note any requests or opinions you wish to communicate to ICRR related to its Inter-University Research Program.
(Optional)

Reference No.

Institute for Cosmic Ray Research, University of Tokyo

Form 3

Confirmation Form for the Inter-University Research Program Applications
for which a Postdoctoral Fellow is the Principal Investigator

Date: / /

Director,
Institute for Cosmic Ray Research,
University of Tokyo

(Principal Investigator)

Affiliation:

Job title:

N a m e:

I have obtained the consent of my superior and am accordingly applying as follows:

Research proposal:

Research period: From MM DD, YYYY to MM DD, YYYY

If selected, the Principal Investigator will designate xx % of their time on the proposed research.

If the above research proposal is selected by Institute for Cosmic Ray Research, the University of Tokyo, I consent to allowing the person specified above to carry out the research as Principal Investigator.

(Superior of the Principal Investigator)

N a m e:

signature

Affiliation:

J o b T i t l e:

Date of Signing:

- Please refer to 3. Eligibility in the Application Guidelines.
- “Superior” is defined as the provider of employment funds.
- If affiliation or employment budget etc. have changed since April after submitting this form, please re-submit the form with the new details.

Form 4

Confirmation of Eligibility

Date: / /

Director,
Institute for Cosmic Ray Research,
University of Tokyo

(Principal Investigator)

Affiliation:

Job title:

N a m e:

The Principal Investigator is a full-time employee that is able to conduct the research independently on their responsibility under their affiliation, having obtained the consent of the head of the institute and is applying as follows:

Job Title:

If selected, the Principal Investigator will designate xx % of their time on the proposed research.

If the research application is selected by Institute for the Cosmic Ray Research, the University of Tokyo, I consent for the above researcher to carry on the research as the Principal Investigator.

Job title and name of the head of the organization

- If the submitted affiliation etc. had changed after April, please resubmit the form with new details.

Form 5

Inter-University Research Program Consent Form

Date: / /

Principal Investigator

Prof. Dr. _____

(Participating Researcher)

Affiliation:

Job title:

N a m e:

I consent to become a Collaborator for the research proposal below at Institute for Cosmic Ray Research, the University of Tokyo. I pledge to obtain accident insurance and liability insurance coverage by the start of the Inter-University Research Program.

Research Proposal:

Research Period: From MM DD, YYYY to MM DD, YYYY

I have obtained the consent of the head of the organization to which I belong to serve as a Collaborator for the above research proposal should it be selected by Institute for Cosmic Ray Research, the University of Tokyo.

(Head of Organization)

N a m e:

Affiliation:

Job title:

(Supervisor)

N a m e:

Affiliation:

Job Title:

(Note: Students are required to obtain the informal consent of both.)

- Head of organization would generally be the Director in the case of a research institute, Dean or equivalent of a university faculty or graduate school, or Chancellor in the case of a single-subject college, etc.

Form 6

Date:

Director,
Institute for Cosmic Ray Research

Research Division Head etc. :

Principal investigator :

Request for permission to add participating researchers and research assistants to
Fiscal YYYY Inter-University Research Program application

With regard to the above matter, we request permission to add participating researchers
(research assistants) as follows.

1. Principal investigator: _____

2. Research proposal: _____

3. Additional researchers (research assistants):

Name: _____

Organization: _____

Department etc.: _____

Job title (for graduate students, write "graduate student"):

Country in which organization is located: _____

Emergency contacts: Tel: _____

E-mail: _____

4. Reason for addition: _____

Safety and health education etc.

We pledge that participating researchers and research assistants will take the safety and health education specified on the facility to be used in the experiment, and observe facility director instructions on safety and health. We also pledge to ensure that the additional participants obtain accident insurance and liability insurance coverage.

Form 7

Request to change Institute for Cosmic Ray Research
Inter-University Research Program expense usage breakdown
(To be submitted if wishing to change more than 50% of assessed amount)

xxxx Division Head or xxxx Center Director

Date:

Applicant's name: xxxx

Organization: xxxx

Contacts (address, e-mail, phone, fax): xxxx

Reason for requested change

(No word limit)

Breakdown of assessed amount

Goods costs: XXX thousand yen Travel expenses in Japan: XXX thousand yen

Breakdown after requested change (Enter the total breakdown amounts.)

Goods costs: XXX thousand yen Travel expenses in Japan: XXX thousand yen

(Note: This matter will be decided after consultation with the ICRR Director.)

Decision

(Leave blank.)

Head, xxxx Division, Institute for Cosmic Ray Research
Name

Research Result Report
ICRR Inter-University Research Program 2022

Research Subject:

Principal Investigator:

Participating Researchers:

Summary of Research Result :

No.

Regulations on Collaborators at the Institute for Cosmic Ray Research of the University of Tokyo

Established September 14, 1989

Revised October 13, 2004

Article 1. Acceptance of Collaborators at the University of Tokyo Institute for Cosmic Ray Research (hereinafter, “the Institute”) is subject to these regulations.

Article 2. A Collaborator is a researcher belonging to a university or national public research institution, or a researcher equivalent thereto and falling under any of the following items.

1. A researcher responding to a public invitation to participate in the Institute’s Inter-University Research Program and whose research proposal has been selected as a Collaborative Research theme. However, applicants must first obtain the consent of the head of the research organization to which they belong before submitting their applications.
2. A researcher who has been invited by the Institute to conduct Collaborative Research at its facilities

Article 3. The period applying to Collaborative Research shall be from April 1 of each year to March 31 of the following year.

Article 4. A Collaborative Research project requires the appointment of a principal investigator.

1. The principal investigator may be either a researcher from outside the Institute or a faculty member of the Institute. However, the principal investigator must be a full-time employee.
2. The principal investigator shall draw up a research plan and be responsible for ensuring the implementation of the Collaborative Research.
3. The principal investigator shall carry out Collaborative Research in consultation with the Head of the Division under which the Collaborative Research is being conducted.
4. After the end of the research period, the principal investigator shall promptly submit a report describing the status and results of the Collaborative Research to the Institute’s Director via the Head of the relevant Division.

Article 5. Collaborators shall comply with the regulations governing Collaborative Research prescribed by the Institute.

Article 6. Collaborators may claim travel expenses within the limits specified separately.

Article 7. When publishing the results of Collaborative Research, Collaborators shall clearly state that the Collaborative Research had been supported by the Institute.

Article 8. Collaborators may use the Collaborative Research facilities, equipment, library, etc. made available by the Institute to conduct their research.

Supplementary Provision: These regulations shall come into force as of September 14, 1989.

Supplementary Provision: These regulations shall come into force as of October 13, 2004.