

Guidelines for GIMRT program of Collaborative Research with Research Divisions and Groups

1. Outline and objectives of collaborative research with Research Divisions and Groups

Institute for Materials Research (IMR) was reorganized in 1987 as a National Collaborative Research Institute. To contribute materials science community in Japan, IMR has provided open accesses for its original facilities, instruments, and knowledge of materials science for researchers belonging to universities and research institutions nationwide. Since FY2010, IMR have been authorized as a “Joint Usage / Research Center for Materials Science” by the Japanese Government.

In November, 2018, IMR’s GIMRT program was certified as an “International Joint Usage /Research Center for Materials Science” by the Government. In this new international collaboration scheme, GIMRT will play the role as a core institute for the collaborative researches in materials science communities in both national and international levels. GIMRT offers open access to IMR’s resources of materials science for global researchers through variety of research collaboration programs and bridges domestic and overseas researchers for multi-core international collaborative research.

This guideline is about collaborative research at Research Divisions and groups in IMR, which is conducted jointly by researchers outside IMR and members of each Research Division and Group.

2. Types

There are four proposal types.

a) Priority Research (Only a few acceptable)

The budget gives priority to support particularly important novel and pioneering research that require frequent visits to IMR and continuous research (Total expenses: up to 1,000,000 JPY). For overseas users, this application should be combined with a stay as guest professor/researcher in IMR or in other domestic institutes to ensure multiple visits available.

Domestic young researchers (the proposal representative must be 37 years old or younger on 1st January 2019) are encouraged to apply for the visiting researcher positions. If accepted as visiting researchers, they will be given status as a part-time employee.

Note that this program will be reformed into Challenging Project from next call.

b) General Research

Research that can be conducted by visiting IMR by the collaboration with members of each Research Division and Group.

For domestic users, the upper limit of total expenses is 250,000 JPY. For overseas users, the upper limit of the travel expense is 500,000 JPY. The estimate of your travel expense is

requested to write in “Research Plan · Method” section of the proposal form by logging into GIMRT user system. Reasonable amount of consumptions needed for onsite experiments may be requested in same manner in addition to the travel expense. It should be written together with travel expense request. The consumption support budget will be handled by local contact.

c) Challenging Research

Young researchers can apply for Challenging Research. The proposal representative must be 37 years old or younger as of 1st April 2019. The total expenses upper limit is 300,000 JPY. This category is not available for oversea users. However, the committee will strongly support applications from young researchers to the General Research category.

d) Workshops

Domestic type: Support information exchanges and discussions held at IMR concerning important current research topics and perspectives. The upper limit of expense is 1,000,000 JPY. The language could be Japanese. Submit proposal at GIMRT user system.

International type: Support information exchanges and discussions held at IMR concerning important current research topics and perspectives. The upper limit of expense is 1,500,000 JPY. The language should be in English. Prepare Type W form and submit it to GIMRT user office by e-mail.

Workshop must be organized in collaboration with IMR local contact.

Note: As part of a general proposal, it is possible to use the supercomputers of the Center for Computational Materials Science(CCMS). If use of the supercomputers is planned, submit account registration form to CCMS . The form is available at the CCMS web site.

3. Expenses

- (1) Research expenses will be provided mainly as travel expenses to visit IMR for collaborative research and/or to participate in a workshop.
- (2) One can request consumable fees for cryogen, gas, consumable parts of devices, a small amount of chemicals, etc., which are essential for research but may be difficult or impractical to bring.
- (3) For workshop, a fee for abstract booklet and/or for report booklet can be included.
- (4) The total amount of consumables and other expenses cannot exceed 50% of the total application amount. For Challenging Research and General Research, one may exceed 50% by clarifying the reason. Expenses should be prepared by the applicant themselves (e.g., raw materials for sample preparation) will not be paid.
- (5) For applications that do not require travel expenses, the maximum application amount for consumables and other expenses is 70,000 JPY. For applications from Tohoku University, no expenses for consumables and other expenses are paid (excluding expenses for workshop).

- (6) For researchers, irrespective of representatives and collaborators, who apply for multiple collaborative research proposals, the upper limit of travel expenses is 400,000 JPY regardless of the number of visits to IMR. This term does not apply for overseas users.

4. Regular and Urgent Proposal Calls

For domestic proposal, we strongly recommend to apply at December round to ensure the travel support. Urgent research proposal can be accepted for other calls in March, June and September, however, availability and support may be limited.

International applications can apply for one of four calls in each year. The acceptance rate depends on the number of proposals and the availability.

5. Items to Note

- (1) Each research representative may only submit one proposal in this category. If necessary, a representative may be a collaborator for other types of proposal. However, if a specific researcher comes to IMR exceedingly frequently, travel expenses may be suspended. A researcher participating in multiple proposals must produce independent achievements (e.g., papers) for each participating proposal.
- (2) IMR members can also apply to host workshop; however, each researcher may only submit one proposal in domestic workshop category.
- (3) Only one Priority Research will be accepted for each Research Division and Group in IMR.
- (4) For Challenging Research, we will honor research proposals that have made excellent research achievements.
- (5) The allocation of research expenses will be adjusted based on the evaluation of the proposal, status of research implementation and achievement submission, the total number of proposals and budget allocation, and will be confirmed through discussions by the proposal committee.
- (6) When graduate students and undergraduate students (major students for technical colleges) use the laboratory in IMR, they must have Personal Accident Insurance for Students Pursuing Education and Research or equivalent one. All other users also must hold a proper insurance. IMR will not provide any insurance for users.
- (7) If you continue with the same research proposal, the maximum research period is three years from the initial one.
- (8) Although researchers of non-academic organizations can apply, the proposal shall be academic and its achievement shall be published. For proprietary research, use the scheme of “Collaborative Research Program with the private sector”.

6. Applicant qualifications

- (1) For this collaborative research, full-time researchers belonging to national/public/private

universities, technical colleges, incorporated administrative agencies, national research and development corporations, special corporations, and national public research institutions can apply as research representatives.

- (2) Special researchers of the Japan Society for the Promotion of Science (SPD/PD/RPD) can apply. In the proposal, please confirm the Special Researcher Compliance Items (employment relationship with the research institute is not required).
- (3) Graduate students and undergraduates (for technical colleges, major college students and academic advisors shall be specified) can be included as collaborators.
- (4) Participants in the Challenging Research are limited to researchers 37 years old or younger. Graduate students or undergraduates (major students at technical colleges) may participate.
- (5) Regarding persons who have foreign nationality or persons belonging to foreign organizations, security export control procedures are required prior to conducting research. Please consult with your local contact for details.

7. Application procedure

- (1) Apply electronically via the GIMRT user system at the following URL.
<https://imr-kyodo.imr.tohoku.ac.jp/?lang=en>
- (2) For the Research Division and Group names, researcher names, and research outlines, refer to IMR's website (<http://www.imr.tohoku.ac.jp/>).
- (3) Application deadlines
 1. Proposal: 20 December 2018 (Thursday)
 2. Collaborative Research Agreement. Three weeks before your visit. It is requested only for accepted proposal.
Submit the Agreement signed by the head of visitor's home institution by postal mail or by e-mail
- (4) Applications in English are acceptable.

8. Research period

The research period for regular December round is from 1 April 2019 to 31 March 2020.
For others, one year from the acceptance.

9. Contact address

GIMRT-office, Research Cooperation Division, General Affairs Section, Institute for Materials Research, Tohoku University
2-1-1 Katahira, Aoba-ku, Sendai, Miyagi 980-8577, Japan
Phone +81-22-215-2183
FAX +81-22-215-2184
Email gimrt-office@imr.tohoku.ac.jp

10. Review process and selection

Each proposal is reviewed by three referees, and decision is made by the corresponding proposal committee based on the review results. The review of the continuing proposals includes the execution rate of travel expenses and the registration status of the research results on the previously accepted proposal. For new proposal, please be sure to include related research activities in the “Previous Research Results” column.

Applicants will be notified of the review results around the end of March 2019.

11. Research Report

The research representative of the accepted proposal shall register the “Research Report” and the output results such as publications via GIMRT user system. Every result that is obtained in the collaborative research, even partly, shall be included in the results. We request users to publish research results within 3 years. Papers may be published after the research period and thus please be sure to register at the GIMRT user system even after submitting the research report for each fiscal year.

If the collaborative research was not carried out due to some reasons, submit a Usage Status Report. After the arrival by the committee, register it in place of the report.

12. Submission of paper, Miscellaneous

Submit one copy of the reprint of the paper published as research achievements (electronic files are acceptable) to the Collaboration Research Office. Additionally, register it via GIMRT user system. Please be sure that IMR is in the Acknowledgments section by stating “by the Collaborative Research (subject number) at the Institute for Materials Research, Tohoku University.” Since the important objective of the GIMRT is to train young researchers, please register master’s or doctoral thesis, if the thesis partially includes results of collaborative research as well as awards, promotion, project launch, patent or industrial application through the use achievements. Documenting these achievements is important to maintain the collaboration budget.

An example acknowledgment is as follows.

This work was performed under the GIMRT Program of the Institute for Materials Research, Tohoku University (Proposal No. **K****).

The formal names of the facilities of IMR are as follows.

- International Research Center for Nuclear Materials Science
- Cooperative Research and Development Center for Advanced Materials
- High Field Laboratory for Superconducting Materials
- Center for Computational Materials Science

○Center of Neutron Science for Advanced Materials

13. Accommodations

Visitors may use the accommodation facility of the Institute (three single rooms, two twin rooms; total capacity of seven). To apply, contact your local contact or GIMRT user office. For details of the accommodation facility, see the “Collaborative Research Guidance”.

14. Handling of intellectual property rights

Intellectual property rights generated as a result of research shall conform to the Tohoku University Joint Research Regulations.

15. Security export control for use of supercomputers

As of FY 2014, applicants for the use of supercomputers who are of foreign nationality or belong to a foreign organization must demonstrate necessity. Such applicants must submit a permission application to the Ministry of Economy, Trade and Industry of Japan through the Security Export Control Office of Tohoku University. Note that the applicants cannot use the supercomputers until the application is approved. Upon approval, we may ask such applicants to submit additional documents such as certificate of enrollment.

Attachment 1 (one can download this form GIMRT user system after the notice of acceptance)

Collaborative Research Agreement

National University Corporation Tohoku University

To Director of Institute for Materials Research

Proposal Number:

Proposal Title:

Name	Job Title	Home Organization

We acknowledge that the above persons will become collaborators.

Day Month Year

Director of home institution
Affiliation/Title/Name

Personal Seal or Signature

I acknowledge that the undergraduate (major student for technical colleges) among the aforementioned persons will become collaborators.

Supervisor:

Personal Seal or Signature

Notes

1. "Director of Research Institution" is the head of the home institution: such as president, dean, director of the department, head of center, or person in the equivalent position who has the responsibility for this agreement.
2. If an undergraduate (major student of a technology college) is included as a collaborator, the supervisor must acknowledge the student.