

**THE JOINT GUIDELINES FOR IMPLEMENTATION
OF
THE PROGRAM FOR JOINT FUNDING OF GERMAN- JAPANESE COOPERATIVE RESEARCH**

In accordance with Article IV of the Memorandum of Understanding (hereinafter referred to as "MOU") signed on October 30, 2006 between the Deutsche Forschungsgemeinschaft (hereinafter referred to as "DFG") and the Japan Science and Technology Agency (hereinafter referred to as "JST"), these Joint Guidelines provide methods of implementation of the Program between the two Parties.

I. General Description

I-1. New Scheme for Joint Funding of German-Japanese Research Cooperation

Based on the MOU, DFG and JST have agreed to establish a new scheme for joint funding of Japanese-German cooperative research projects. After consultations between DFG and JST, "Nano-Electronics" has been selected as the field of research for which the joint funding scheme will be applied to.

I-2. Aim of Program and Research Field

The aim of the program is to strengthen the collaboration between Germany and Japan within the field "Nano-Electronics" to achieve world-class scientific results, leading towards new innovative technologies.

This specific area is currently undergoing remarkable development and is considered important by both DFG and JST in order to achieve steady growth and sustainability in the long run.

Examples of research areas within Nano-Electronics are:

1. Materials and Nanostructures for Spintronics
2. Scanned Probe Approach and Atomic Scale Transport
3. Molecular Approaches for Electronics and Photonics
4. Metal and Semiconductor Spintronics
5. Semiconductor Nano-electronics
6. MEMS and NEMS technology
7. Nanophotonics and related Technology

The current plan is to issue a call for proposals at three different timings with the first announcement in March 2007, followed by the second call in 2008 and the third call in 2009. Each project will be funded for a period of three years.

I-3. Prospective Applicants

DFG and JST invite German and Japanese researchers to submit proposals for cooperative research projects in the research areas described above. All applicants must fulfill national eligibility rules for research grant application. An important criterion of the proposed collaboration is that it should build on and reinforce already on-going research activities in each research group and contribute significant added value to these. Researchers from the industry may participate in the joint collaboration, but cannot be funded by the DFG.

I-4. Financial Support

DFG and JST plan to support cooperative research projects including dispatching and inviting researchers to the counterpart country. DFG supports expenses for German researchers, and JST supports expenses for Japanese researchers.

II. Support by DFG/JST

It is envisioned to fund a total number of 5 to 10 bilateral projects per call depending on the thematic scope.

II-1. Budget for a Cooperative Research Project

II-1.1 JST

Budget of a project may differ in each year, depending on the content of activities, but the total budget for the Japanese researcher over a full 3-year period (i.e., 36 months) should not exceed 15 million yen, in principle. (Example: a proposal may envisage a budget of 4 million yen for the first year, 6 million yen for the second year and 5 million yen for the final year.)

Due to budget limitations of this program, amounts will be adjusted in each year.

Expenses for facilities and equipments may be requested, in principle, only for the first fiscal year.

II-1.2 DFG

The principal cost categories include personnel and direct project costs, such as travel and publication expenses. All budget items must conform to the national rules relevant for each applicant following the rules of the individual grants program.

II-2. Cooperative Research Period

The cooperative research period shall be 3-years (i.e., 36 months) in total, counting from the start date in autumn 2007.

II-3. Details of Support

This program is designed to support additional expenses related to cooperation with a Japanese counterpart for a German researcher or with a German counterpart for a Japanese researcher, such as expenses for travel and/or conducting seminars/symposiums, with the precondition that the main research infrastructure is already ensured by each research group.

II-3.1 Contract between Applicant and DFG/JST

As for the contractual relationship between the German institution and DFG, the German Act on Employee's Inventions (ArbNErfG) shall apply, meaning that all results derived from this project can either be claimed by the institution the respective researcher is employed at or conferred by this institution to the researcher. The DFG itself does not claim any rights on results, intellectual property etc. derived from DFG-funded projects.

Support will be implemented according to a contract for commissioned research entered between JST and a university or public research institute, etc. (hereinafter referred to as the "institution").

The contract for commissioned research will be renewed each year over the cooperative research period.

Since the contract is concluded on condition that all administrative procedures related to this project be handled within the institution, the research leader should consult with the department in charge at his/her institution.

As for the contract between the Japanese institution and JST, it stipulates the Article 30 of the Law on Special Measures for Industrial Revitalization (Japanese version of the Bayh-Dole Act) be applied to all intellectual property rights (patents, utility model or design rights, rights to programs, databases and other intangible property and know-how, and so on) generated as a result of this project, and that these can be the properties of the institution with which the research leader is affiliated.

II-3.2 Contract between Researchers

If a contract for cooperative research is necessary for implementing actual research cooperation, such a contract should be concluded between the German institutions and the Japanese institutions. It is strongly advised, though not required, that appropriate discussions of the issue of rights regarding intellectual properties with German respectively Japanese researchers or research institutions take place, in order to ensure good collaboration. If an agreement is concluded, it should be reported in the application.

II-3.3 Funded expenses

Funding provided within this call is intended to enhance the capacity of the applicants to collaborate. Funding will therefore be provided mainly in support of the collaboration vectors and of the local research that is necessary for the collaboration. Projects will be funded for up to three years

- Stipend or salary for a PhD student, salary for a post-doctoral fellow (i.e. a temporary position for up to 3 years, financed according to national gross wages). In countries where national rules allow it, the salary of the young researcher may be included.
- Consumables
- Small equipment
- Travel and visiting costs.
- User charges for facilities.

All budget items must conform to the national rules relevant for each applicant.

III. Application

The German and Japanese applicants shall write a common application that shall be handed in both to DFG and JST in parallel. The application shall be written in English. For the Japanese applicants a Japanese version of the application is also required.

The application shall include:

- a) Project description including how collaboration will be carried out, with clear statements of what roles German and Japanese researchers respectively will play respectively in the project;
- b) Description on the expected outcome of the proposed project, scientifically as well as in terms of its relevance for the industry and society;
- c) Description on the ongoing activities and specific advantages of the German and Japanese groups respectively, which form the basis for the proposed joint project;
- d) Description on the expected added value from the proposed joint project, including how the competence, technology and other resources in each group complement each other;
- e) Description of how the project is expected to help strengthen research cooperation between Germany and Japan over the longer term;
- f) Description on the added value expected from the multidisciplinary approach in the proposed joint project; and
- g) Discussion on how the proposed joint project compares with other comparable activities worldwide.

III-1. Application Forms

The following application forms have been prepared, in Japanese (J) and English (E).

- Form 1J/E Application outline (title of cooperative research project, names of research leaders, cooperative research period)
- Form 2J/E Information on research leaders (their CVs*)
- Form 3J/E Name list of individuals committed to the cooperative research project in Germany and Japan
- Form 4J/E Description of the cooperative research project including the points stated above *-maximum of 10 pages-*
- Form 5J/E Plan for the cooperative project
- Form 6 E Papers and other publications by the Japanese-side research leader in the past 5 years
- Form 7 E Papers and other publications by the German-side research leader in the past 5 years
- Form 8J/E Budget plan for the project

** The description shall include a short Curriculum Vitae (CV) from both German and Japanese research leaders, which include basic information on education, past and present positions and membership of relevant organizations/associations. Each description should not be more than 1/2 page A4.*

III-2. Preparation of Application Forms

Applicants should fill in the particulars in all the application forms listed in above 1.

III-3. Submittal of Application Forms for German and Japanese Applicants

Applicants for the first call for proposals should send the applications by 15 June, 2007 to: www.jst.go.jp for the Japanese researchers and to johanna.kowol-santen@dfg.de as well as in paper form for the German researchers.

IV. Evaluation of Project Proposals

IV-1. Evaluation Procedure

Committees consisting of experts selected by DFG and JST respectively will evaluate all proposals. Based on the results of the evaluation, DFG and JST will make a common decision regarding funding of selected proposals.

The members of the program committee in Germany and Japan will be selected after the proposals have been received.

IV-2. Evaluation Criteria

The following general evaluation criteria will apply to each proposed project:

- 1) **Conformity with Program Aims and Designated Research Fields**
The proposed activity shall conform to the aims of the program and the research fields that the program designates. In addition, the proposed activities shall be supported by the applicants' utilizing their resources available.
- 2) **Capability of Research Leaders (one on each side)**
The research leaders shall have the insight or experience necessary for pursuing the activity and the ability to manage the cooperation and reach the project goals during this program's period of support.
- 3) **Appropriateness of Plan**
The plan shall incorporate an appropriate system for implementing the activity and be realistic in relation to the project budget.
- 4) **Effect of the Activities**
The proposed activities can be expected to achieve one of the following, through the cooperation with researchers in the counterpart country:
 - Opening up of a new field or new advances in science and technology through the creation of new scientific knowledge in an existing research field.
 - Nurturing of researchers able to play a central role in future research exchanges with the counterpart country.
 - Sustained development of research exchanges with the counterpart country initiated by this activity.

The effect of the activities shall be evaluated by the following specific evaluation criterion:

On-going research activity

The proposed collaboration shall build on, reinforce and add significant value to already on-going research activities in each research group.

IV-3. Announcement of Decision

The final decision regarding supported projects in the first year will be notified to the applicants around October 2007.

V. Responsibilities of Research Leaders After Proposals are Approved

After the proposal has been approved, research leaders and their affiliated institutions shall observe the following when carrying out the cooperative research and utilizing supported expenses.

V-1. Annual Progress Report (JST)

At the end of each fiscal year, the research leader shall promptly submit a progress report on the status of research exchange, and the institution with which the research leader is affiliated shall promptly submit a financial report on supported expenses.

V-2. Final Report

After completion of the period of international research exchange, research leaders shall promptly submit a final report to DFG and JST, in addition to a financial report, on the research exchange activities to JST. The report shall include a general summary (maximum five A4 pages) compiled jointly by both the German and the Japanese research groups, which German researchers are requested to submit to DFG.

If papers describing results of research exchange are presented to academic journals, societies and so on, which is expected by DFG, please attach copies of such papers separately to the final report.

German applicants should contact the following for further information:

DFG

Dr. Johanna Kowol-Santen
Department of Physics, Mathematics, Geosciences
German Research Foundation
Tel. +49 (228) 885-2769 Fax +49 (228) 885-2777
Johanna.Kowol-Santen@dfg.de

Japanese applicants should contact the following for further information:



Masashi Hara, Tetsuji Tanaka
Department of International Affairs
Japan Science and Technology Agency
Tel. +81(0)3-5214-7375 Fax +81(0)3-5214-7379
sicpge@jst.go.jp

Bonn, 1 March, 2007
On behalf of
Deutsche Forschungsgemeinschaft

A handwritten signature in black ink that reads 'Robert Paul Königs'.

Robert Paul Königs
Head, Scientific Affairs Division

Bonn, 1 March, 2007
On behalf of
Japan Science and Technology Agency

A handwritten signature in black ink consisting of Japanese characters: '寺沢 計二' (Terazawa Keiji).

Keiji Terazawa
Director, Dept. of International Affairs