



Korean-Swiss Science and Technology Programme

Joint Research Projects: Call for Proposals 2025

Closing date: 27 February 2025

A maximum of 10 joint projects will be funded.





1 Introduction

The Korean-Swiss Science and Technology Programme was initiated by the Korean and Swiss governments in 2008 in order to further step up the bilateral cooperation in scientific and technological areas of relevance to both countries. The cooperation is based on the principles of reciprocity, parity and activity-matching funding.

The Swiss National Science Foundation (SNSF) and the National Research Foundation of Korea (NRF) were mandated to launch a call for Joint Research Projects (JRPs), organise the evaluation of the submitted proposals and monitor the funded projects.

2 Joint Research Projects

Grants for Joint Research Projects (JRPs) are aimed at promoting collaborative projects with clearly defined goals, involving at least one partner based in Switzerland and one based in Korea. Applications should describe ambitious research and propose innovative approaches. The research is to be carried out at the research facilities involved; reciprocal visits and short stays in Switzerland for researchers from Korea and vice versa are also possible within the scope of a JRP.

The project duration is 4 years. Proposals for projects shorter than 4 years are not eligible and will not be evaluated.

3 Research Fields

Research topics of interest in this program include the following broad areas as below:

- Quantum computing / simulation
- Quantum communications and networks
- Quantum sensing / measurement
- Fundamentals of Quantum information science and technology
- Quantum ethics

Examples of more specific scientific focus areas under this could be as below:

- Quantum simulation of topological matter
- Quantum Information Transfer between Superconducting Quantum Nodes via Optical Light





- Quantum sensing with entangled mechanical oscillators
- Development and application of scanning magnetometry based on solid-state spin qubit
- Development of Macroscopic spin-based hybrid quantum system
- Qubit devices using exciton-polariton condensates
- Research on quantum optics and photonic quantum information science
- All-in-one LNOI photonic IC chip
- Spin-Orbit Qubit-Based Quantum Computing System

4 Eligibility

Each proposal for a JRP must have at least one applicant based in Switzerland and one applicant based in Korea; they are the contact persons on the Swiss and the Korean side respectively. They bear the responsibility for the technical and administrative coordination as well as the timely delivery of scientific and financial reports. Each applicant can only submit one proposal. The call is open to researchers from all eligible research institutions in Switzerland and Korea.

The project duration is **4 years**. Proposals for projects shorter than 4 years are not eligible and will not be evaluated.

If the proposal does not meet the eligibility criteria of either the NRF or the SNSF, the proposal will not be considered for evaluation.

Eligibility criteria in Switzerland

Only applicants based in Switzerland are eligible, and must meet the eligibility criteria of the SNSF. The SNSF <u>Funding Regulations</u>, the <u>General implementation regulations</u> and the <u>Regulations on Project Funding</u> are applicable mutatis mutandis where not stated otherwise.

Applicants can submit a proposal to the joint bilateral call even if they hold another SNSF grant or have applied for one. Moreover, grantees may submit proposals to all SNSF funding schemes during the funding period of a JRP, provided that there is no substantial thematic overlap. Please note that the present call is not in conflict with the restrictions applicable to the SNSF's national project funding in accordance with Article 13 of the Regulations on Project Funding. Ambizione and PRIMA grantees can contact the SNSF office to check their eligibility.

Project partners as described in Article 11.2 of the SNSF Funding Regulations are not entitled to receive funds from the SNSF if their affiliated institution is located in Korea.





Eligibility criteria in Korea

Korean applicants should abide by the applicable laws and regulations of the Ministry of Science and ICT (MSIT).

5 Funding

JRP proposals include two separate budgets: one budget in CHF for the Swiss part of the project (paid by the SNSF according to the SNSF's rules) and one budget in KRW for the Korean part of the project (paid by the NRF according to the NRF's rules). The two countries have agreed to fund up to 10 projects if a sufficient number of proposals of high quality are submitted.

- The total budget available in Switzerland is CHF 8,000,000. The maximum budget available for the Swiss side of a project is CHF 800,000 for a 4-year project (CHF 200,000 per year per project).
- The total budget available in Korea is KRW 12,000,000,000. The maximum budget available for the Korean side of a project is KRW 1,200,000,000 (KRW 300,000,000 per year per project).

Both, the Swiss and the Korean budget will be submitted in the SNF portal (Korean to be uploaded). Additionally, the Korean budget needs to be submitted in the Korean online system.

Eligible costs in Switzerland

- Personnel costs (salaries within the salary ranges and rates set by the SNSF and social security contributions of scientific and technical employees); please note that the salaries of applicants are not eligible costs;
- Material costs that are directly related to the research work, namely material of enduring value, expendable items, field expenses, travel expenses, third-party charges or computing time;
- Direct costs incurred through the use of research infrastructure linked to the research work;
- Costs for granting access to research data (Open Research Data, max. CHF 10,000 per project);
- Costs for the organisation of conferences and workshops in connection with the funded research;
- Costs for national and international cooperation and networking activities carried out in connection with the funded research.





The SNSF regulations apply to the Swiss budget (see also the <u>guidelines</u>). However, overhead costs are not admissible. Please note that costs for open access publications can be requested separately via the OA platform of the SNSF. However, costs for Open Research Data (ORD) must be taken into account at the time of submission of the application. They cannot be covered by a supplementary grant.

Eligible costs in Korea

Please abide by the applicable laws and regulations of the Ministry of Science and ICT of Korea.

6 Submission

Proposals are to be jointly prepared by Swiss and Korean applicants. They must be submitted via the <u>SNF Portal</u>.

The Korean main applicant must submit the same research plan (English and Korean versions) through Korea's national electronic submission system (iris.go.kr).

Proposals that are only submitted to one of the two funding agencies are ineligible.

Hardcopies will not be accepted. Neither the SNSF nor the NRF will be held responsible for non-submission of a proposal.

Submission on the SNF Portal: After login into the SNF Portal, the correct funding scheme must be chosen: Korean-Swiss Science and Technology Programme (KSSTP). See also the <u>guidelines</u> for submitting a proposal in the SNF Portal and note that all applicants need an account.

Please note that the SNSF uses a new CV format. Filling in the information might take some additional time. You can find all relevant information <u>here</u>.

For specific questions related to the SNF Portal, please contact the support team via <u>SNF Service Por-</u> <u>tal - Jira Service Management (atlassian.net)</u> or telephone (+41 31 308 22 00). Please note that all participating researchers need an account in order to fill in and submit the proposal.

Data Management Plan (DMP): A Data Management Plan (DMP) is requested for approved grants according to the requirements issued by the SNSF. Funds can only be released once the DMP has been submitted. Missing or inaccurate statements in the DMP need to be added/revised at the latest before the release of the payment of the second instalment. A definitive and updated version of the DMP must be provided by the end of the project grant. For more details on the DMP format requirements and procedure see: <u>Data Management Plan (DMP)</u> - <u>Guidelines for researchers</u>.

The submitted information must comply with the **principles of scientific integrity**. All applicants take responsibility for the correctness of their contributions. If the project plan is not written in accordance with the rules of good scientific practice, all applicants are accountable and may be asked to provide a statement; ultimately the project may not be considered. Reference is made to internationally recognised standards on good scientific practice as well as to the <u>SNSF's Research Integrity Regulations</u>.





Deadline for submission of applications Switzerland: 27 February 2025, 17:00 local time Korea: 27 February 2025, 6 pm local time

Applications need to be submitted to both funding agencies. Late or incomplete applications will not be considered.

7 Evaluation

The joint call will be evaluated jointly by the SNSF and the NRF and follows the SNSF's unified evaluation procedure. (\rightarrow Evaluation procedure – this is how we select) The evaluation process is highly competitive and only highly rated applications will be considered for funding. Peer reviewers and members of the evaluation panel must meet SNSF's and NRF's requirements to be evaluating experts. The process consists of the following steps:

Peer review: Proposals for JRPs will be reviewed according to standard international peer review procedures, jointly organised by the SNSF and the NRF, including international as well as Korean reviews. External experts conduct a peer review of the applications, evaluating the scientific quality of JRPs. About 4 reviews (2 nominated by each funding agency) should be obtained per proposal.

Evaluation panel: An evaluation panel will be set up, composed of experts proposed by the SNSF and the NRF. The evaluation panel will rate and rank the proposals based on the peer reviews and the panel members' own assessment. The panel members' recommendations will include a rationale for the rating.

Decision: The outcome of the joint evaluation panel should be a list of all proposals ranked from highest to lowest priority for funding. Based on the ranking list of the joint evaluation panel and available budget, the SNSF and NRF shall decide on the final list of proposals to be funded. The 10 highest-ranked proposals will be funded. Funding decisions on proposals of similar scientific quality around the funding line may be reached by drawing lots (random selection). At the SNSF, the ranking list and the projects proposed for funding must be approved by the Programme Committee International Cooperation. At NRF, it must be approved by the Ministry of Science and ICT (MSIT). By undergoing this procedure, the projects will be considered as approved by the Korean-Swiss Joint Committee.

The criteria used to evaluate the proposals are:

- Scientific relevance, originality and topicality
- Suitability of methods and feasibility
- Applicants' scientific track record and expertise
- Collaborative research





The evaluation results will be communicated to the applicants in autumn 2025. The Swiss contact person will receive a decision letter from the SNSF. In case of rejection, the main reasons leading to the decision will be given. In case of approval, the Swiss budget and the conditions will be listed. If applicable, the Swiss main applicant will be responsible for transmitting the decision to the other Swiss applicants. The decisions are not subject to appeal. The Korean contact person will be informed by the NRF.

Earliest starting date for the JRPs: 1 October 2025

8 Reporting

Swiss and Korean grantees will report separately to the SNSF and the NRF.

In Switzerland:

The Swiss contact person will be responsible for reporting to the SNSF. Standard SNSF regulations apply both for the financial and the scientific reports.

In Korea:

The Korean contact person will be responsible for reporting to the NRF. Both for scientific and financial reports, the standard NRF regulations will apply. However, scientific reports will need to be submitted through Integrated R&D Information System (iris.go.kr) annually.

9 Payment

In Switzerland:

Standard SNSF rules apply. In principle, the budgets for JRPs are transferred in annual instalments to the Swiss main applicant at the beginning of a project year.

In Korea:

Korean researchers will be funded under the Regulation for the National R&D Program Management of Korea. In principle, the budgets for JRPs are transferred in annual instalments to the Korean PI at the beginning of a project year.

10 VAT

In Switzerland:

The JRP grants are not subject to VAT or other taxes and charges. However, research expenses are not excluded from VAT. Therefore, all eligible costs occurred during a JRP (e.g. equipment, consumables, etc.) can be charged to the programme, including VAT, unless the research institution (e.g. universities, public research organisations, etc.) is able to recover VAT.





11 Publications and Intellectual Property

The PIs are obliged to publish research results generated by the JRPs in appropriate form and according to SNSF and NRF standards.

Intellectual property rights belong to the respective researchers and/or their employing institutions. It is the responsibility of each research partner to ensure the efficient protection and proper distribution of any intellectual property arising from the accomplishments of the joint research projects.

12 Contact

In Switzerland:

Swiss National Science Foundation Delphine Marchon International Cooperation Wildhainweg 3, P.O. Box CH-3001 Berne Phone: +41 31 308 23 19 E-Mail: <u>international@snf.ch</u> Website: <u>www.snf.ch</u>

In Korea:

National Research Foundation of Korea (NRF) Jaeyoung Hwang Division of Quantum Technology 201, Gajeong-ro, Yuseong-gu, Daejeon, Republic of Korea National Research Foundation of Korea Phone: +82-42-869-7835 E-Mail: jae00.hwang@nrf.re.kr Website: www.nrf.re.kr





Annex 1: Guidelines for writing the research plan (scientific part of the proposal)

The research plan must not exceed **17 pages and 68,000 characters with spaces**. The first limit reached applies. This includes the title or front page, footnotes, illustrations, formulae, tables (and, if applicable, the table of contents), but not the bibliography. At least **font size 10 and line spacing 1.5** must be used. **The research plan may not contain any annexed documents**.

The page and character count in the SNSF Portal is binding. Applications with research plans that are too extensive cannot be submitted. Note that the number of characters may vary slightly depending on the document format / PDF coding.

The research plan submitted to the SNSF must be written in English and be structured as follows:

1. Current state of research in the field

By citing the most important publications in the relevant field, please set out the scientific background and basis of the project, explain the need to perform research on the topic you propose and briefly describe important research currently being conducted internationally.

2.Current state of own research and partnership aspect

- Please describe briefly the work done by the different applicants in the relevant research field or in related fields and indicate the relevant publications.
- Explain how the different applicants complement each other for the proposed research project.
- Describe past collaborations that involved the Swiss and Korean partners (if applicable).

3. Detailed research plan

Against the background described in sections 1. and 2., state the aims that you plan to attain during the lifetime of the project. Please consider the following points:

- Which investigations and/or experiments do you plan to carry out/are necessary to attain the stated aims?
- What is the rationale for getting the project started and how do you intend to develop the work later on?
- What is the expected added value (synergistic benefit) of the collaboration?

Information concerning the methods necessary to attain the aims:

- Which are the methods available to you?
- To which other methods do you have access and how?
- Which methods need to be developed?





Data and data collection:

- Which data are available to you and from where?
- Which data need to be collected?
- Does the proposed project contain ethically sensitive or safety-related aspects or does it raise legal issues? If so, how will you deal with them?

4. Work division, schedule and milestones

- Please indicate how you plan to divide the work among the different partners.
- As far as possible, please give an approximate schedule for the work to be carried out within the project and indicate the most important milestones. In particular, please describe the major tasks of the staff to be employed within the project by the different partners.
- List the planned visits between the Swiss and Korean research groups (visiting scientist, hosting scientist, purpose of visit, date and duration of visit).

5. Importance, impact and results

Scientific importance and impact

Please describe briefly the importance of your research for the scientific community and the impact you expect from the project on research, training and teaching in your field/discipline. Please indicate how you will publish/communicate your results.

Expected results and dissemination plan

Describe in detail the project outcomes you envisage, including new theories, methods, materials; scientific significance and potential application. Explain how you will share these findings with stakeholders and the community. Address the potential for knowledge transfer to industry (if applicable).