

## Rules for carrying out applied research projects as part of the Nano-Argovia program

### General remarks

The projects should be within the field of nanotechnology and have clear potential for applications. We particularly welcome proposals that close the gap between basic research (typically supported by the SNSF or the SNI PhD School) and product-oriented research projects (typically supported by Innosuisse). In principle, the resources allocated by the Canton of Aargau for applied research projects in nanotechnology are intended to support collaboration between the academic institutions in Northwestern Switzerland (University of Basel, FHNW, PSI, CSEM Allschwil and D-BSSE at ETH Zurich in Basel) and industry. With the founding of the ANAXAM Technology Transfer Center for Advanced Manufacturing in the Canton of Aargau in 2019, ANAXAM became an academic partner for Nano-Argovia projects. If ANAXAM is an academic partner in a Nano-Argovia project, the second academic partner **cannot** be the PSI; rather, the project must include participation by the University of Basel, FHNW, CSEM Allschwil or D-BSSE. Projects should build upon existing synergies, highlight potential for applications and market opportunities and pave the way for commercialization. New approaches to innovation processes and the training of young students are most welcome — for example, in the form of a project concept in which some of the work is carried out in industry with the joint use of the existing infrastructure, or projects involving the exchange of workers. Applications can be submitted in German or English.

### Partners

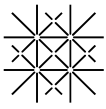
Each proposal must include at least two of the six academic institutions (University of Basel, FHNW, CSEM Allschwil, D-BSSE at ETH Zurich in Basel and PSI **or** ANAXAM) as active partners; in this context, FHNW MuttENZ and FHNW Windisch count as two institutions. The project must involve at least one industry partner from Northwestern Switzerland (from one of the cantons of Aargau, Basel-Stadt, Basel-Landschaft or Solothurn), and proposals are particularly welcome from start-ups and SMEs. The nature of this involvement depends on the degree of development of the project. As the main funding is provided by the Canton of Aargau, preference is given to an industry partner from the Canton of Aargau if the project proposal is of the same standard. Approximately 50% of projects in the SNI's portfolio have an industry partner from the Canton of Aargau.

Other academic partners are welcome if they contribute to the success of the project, but they are not provided with financial support by the Nano-Argovia program.

### Industrial participation

Depending on the degree of development of the project, the participation of the industrial partner(s) can take the following forms:

- Minimum requirements for industrial partners:
  - A written statement regarding the project or a declaration of intent that at least clarifies the degree of involvement in the project and the degree of development. The statement should also indicate that, in the event of success, the company will play a greater role in a potential follow-up phase (e.g., in the second year). Applications without a supporting letter from the industrial partner will be rejected without further evaluation; this also applies to requests for prolongation.
  - The company should actively participate in project meetings.



- Expanded participation of industrial partners:
  - Involvement in the project with their own staff. Equipment, materials and instruments that the company provides for the project free of charge.
  - Financial contributions (not required but desirable).
  - Whatever the case, on completion of the project, the SNI also expects a written statement from the industry partner(s) regarding the benefits of the project as well as details of whether and how its results will be used and further developed in industry.

## Project structure

Applications for project funding within the framework of the Nano-Argovia program must be submitted in German or English using the “Nano-Argovia Proposal Template” provided.

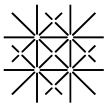
Project proposals can be submitted for a period of one or two years. At the time of the initial award, the reviewers decide whether a project will be funded for only one year or whether a request can be made to prolong the project for a further year. Projects are only ever approved for one year. **A new request must always be made in order to prolong the project for a second year.** Those planning a two-year project must set out the intended term at the time of the proposal, but the referees can decide that even these projects will be limited to one year. Prolongation is not possible if a project proposal is made for only one year. In general, 50% of projects are one-year projects.

When a proposal is made for a two-year project, budget targets must be submitted for each year. Likewise, the industrial partner must submit a statement regarding the achieved project objectives and their involvement in the second year. Projects as part of the Nano-Argovia program are not suitable for dissertation projects. That is the purpose of the SNI PhD School, which has been established at the SNI since 2012.

In the introduction, the application should not only provide a description of the innovative concept and the state of current knowledge, but also address the situation concerning patents in this area. If the structure of the application is divided into work packages (WPs), please do not indicate a literature search as the first milestone; the literature search is part of the application process.

Milestones and achievements must be clearly defined and verifiable, and the proposal should set out how the industrial partner will implement the results if the project is successful.

In addition, proposals must include a personnel budget (in person-months) and a financial budget (in CHF) in the form of an Excel file. This must be prepared using the template provided by the SNI (“Nano-Argovia Budget”). The personnel working on the project objectives are set out in the personnel budget, whereas the financial budget sets out the proposed costs (personnel, ongoing costs, travel and investments) that would be funded by the Nano-Argovia program. It is essential that the proposed financial budget for the funding adheres to the standardized rules for personnel costs, which define maximum values. The categories and maximum values are based on the former “tariff B” for projects funded by the Commission for Technology and Innovation (now known as Innosuisse). The budgeted amounts are based on a total of 1,824 working hours per person per year or 152 working hours per person per month.



### Maximum personnel costs by category (including social security contributions by the employer)

Project leader	CHF 192k p.a. (max. 2 people p.a. = 24 months)
Deputy project leader	CHF 159k p.a. (max. 1 person p.a. = 12 months)
Research assistant	CHF 110k p.a.
Technician	CHF 98k p.a.
Doctoral students and other graduates	SNSF grants

Only academic institutions can be funded by the Nano-Argovia program. Direct financial contributions cannot be made to industry partners.

### Financial framework

The funding for Nano-Argovia projects ranges from CHF 50,000 to max. CHF 150,000 per year, depending on the scale of the project. Proposals that exceed the maximum value have little chance of receiving funding. The SNI has established a financial framework of approx. CHF 1.3m for Nano-Argovia projects. It typically funds 10 to 15 projects per year.

### Review

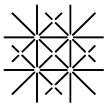
All proposals are assessed by a panel of referees, and the executive committee of the Swiss Nanoscience Institute makes a decision on funding based on the referees' recommendations. Projects whose proposals set out a term of two years are evaluated after one year, and the outcome determines whether funding is granted for the second year of the project. This evaluation is only possible if the project team submits a new application — a complete request for extension — in a timely manner at the time of the next call.

### Report

Accepted projects are incorporated into the portfolio of activities of the Swiss Nanoscience Institute. All project leaders are required to participate in the written report and the review process. Furthermore, all academic principal investigators are required to take part in all SNI activities, including joint meetings and workshops. Every project must deliver at least one annual **progress report that can be published**. These reports are part of the SNI's Annual Report and are requested by the SNI on an annual basis for all current projects. They must be submitted by mid-December of the current year. In addition, the project partners are required to assist the SNI in the preparation of communication materials by delivering timely responses to texts relating to the project in question.

### Membership

SNI membership was introduced in 2014. All successful applicants (lead and co-applicants) automatically become members of the SNI network, which is made up of all SNI members together with the six institutions. Membership of the SNI is intended to be beneficial for members, but also comes with certain obligations (see SNI Membership Regulations).



## Agreements

The following procedures must be adhered to for collaborations with third parties (industrial and academic partners):

- During the preparation of the research application, a confidentiality agreement (CDA) should be signed between the parties with regard to a possible collaboration in order to regulate the flow of confidential information. This agreement does not grant or transfer any rights.
- If the SNI Executive Committee decides to fund an application, the SNI sends the **funding decision** to the lead applicant. If the definitive funding amount is less than the amount requested in the application, the project partners agree on a revised project plan and an appropriately adjusted budget. The modified project plan, as the case may be, and the revised budget are part of a **project agreement** that is to be concluded between the partners and the SNI. This agreement is an SNI document that regulates the principal obligations between the SNI and the project partners. The agreement must be signed by all partners and submitted to the SNI secretariat by 31 December before the first project year begins.
- **In addition to the project agreement**, the project partners must negotiate an **accessory agreement** between themselves. For this purpose, the SNI provides a draft agreement that was prepared by the University of Basel in collaboration with the PSI and FHNW.

The agreement provides a reasonable basis and includes the following points:

- demarcation from existing intellectual property (background technology)
- details of the area of application in which the industry partner(s) is/are permitted to utilize the project results (foreground technology)
- procedure in the event of inventions or the emergence of other intellectual property (foreground technology)
- procedure, including cost allocation, for the registration, monitoring and relinquishment of registrable intellectual property rights (patents, designs, trademarks)
- duty of confidentiality and publishing rights
- compensation of the academic partner(s) for the right to use existing intellectual property (background technology) and the results of the project (foreground technology)
- responsibilities
- warranties and liability of the project partners.

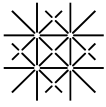
**Projects are only funded if the intellectual property and its use, as well as the resulting value creation, remains in Switzerland.**

The accessory agreement should be submitted by the end of June in the first project year. The Swiss Nanoscience Institute reserves the right to terminate the project with immediate effect if it is likely that no agreement will be reached between the project partners and that the accessory agreement will not be submitted by **30 June of the first project year**.

## Prolongation of projects

As stated above, apart from projects that are limited to one year in advance, Nano-Argovia projects can be prolonged for a further year. There are two ways of doing this:

- a) By submitting a proposal as part of the annual Call for Proposals. A budget for a second year can be applied for as part of this process.



b) The project is delayed and is to be extended beyond 31 December of the current year.

If the project was approved in situation a), the parties must sign a **prolongation agreement**, which is essentially the same as the project agreement with a modified budget. The accessory agreement remains in force for a further year.

In situation b), we distinguish between two sets of circumstances:

b1) If the project can be completed by 31 March of the following year, it is sufficient to make a short written request to the SNI. This must be received before 31 December of the current project year. Timely submission of the request must be demonstrated by way of the postmark or the sending date of the email. There are no further obligations. The project must be settled up in full financially by 30 June of the year of the cost-neutral prolongation within the framework of the approved budget. Project funds not called in by this point revert to the SNI.

b2) If prolongation is sought for a full year, however, the obligation to participate in the SNI Annual Report also applies to the following year. Here, too, a short request must be made to the SNI by 31 December of the current project year, and timely submission of the request must be demonstrated by way of the postmark or the sending date of the email. Cases that come under b) have no cost implications for the SNI. The requests are usually accepted, and the remaining funds are transferred to the next year. If the SNI has not received a request by 31 December, the corresponding items are offset in the budget. A cost-neutral prolongation — that is, b1) or b2) — can only be requested once for each project.

Projects that are limited to one year can be granted a cost-neutral prolongation under b1) and b2).

### **Additional funding opportunity for rejected project proposals**

Since 2018, the SNI has offered a new funding opportunity for Nano-Argovia project proposals in the event of a rejection. Together with the industry partner, the research partners can formulate part of the proposal as a project or master's thesis for nanoscience students at the University of Basel. This project should ideally be carried out at the industry partner. If the project is successfully advertised as part of the nanosciences program at the University of Basel, the SNI is able to provide research partners with up to CHF 10,000 for travel costs, consumables, etc. in respect of the project or master's thesis.

### **Final remarks**

Proposals must be submitted with all documents in the required form **in one PDF with the acronym of the project as the file name** to [claudia.wirth@unibas.ch](mailto:claudia.wirth@unibas.ch) no later than **30 September** of the given year.

Only complete project proposals that meet all of the stated requirements and contain all necessary documents will be approved for evaluation by the referees. Incomplete project proposals will be rejected even before being evaluated.