

Call for project proposals SSF Instrument, Technique, and Method Development Projects 2024 (ITM24)

The Swedish Foundation for Strategic Research (SSF) announces a total of SEK 120 million in a national call for proposals on instrument, technique, and method development projects that are internationally competitive and have the aim to strengthen Swedish-based research with relevance and impact for present or future Swedish-based industry and society.

Background

Instruments, technique, and method development is a necessary factor for competitive research and innovation. Yet, direct public funding with this aim is largely lacking.

Innovation-spirited research engineers, non-faculty researchers, staff scientists, PhD, and Post-Docs need to be challenged by and supported with adequate resources to realize and demonstrate new tools and methods for science and engineering. The present SSF program is intended to encourage such development and at the same time promote research staff career paths for professionals.

Scope

This strategic initiative has a focus on realizing enabling technologies in the form of instrumentation, technique, and method development that promotes research and applications.

The proposed projects should aim to make scientific or technological breakthroughs by providing novel instrument and/or method development and/or techniques targeted at important applications problems. Thus, the projects should enable future research, innovations or services around which industry, and/or public sector can grow. SSF encourages collaboration and utilization of project results during project time.

The following non-exclusive target activities aiming at industrial and/or scientific application are considered by SSF to be particularly strategic to Sweden, within the present Call:

- Conceiving, designing/constructing, and implementing scientific instrumentation,
- Creating novel computer architectures, e.g., Al, system programs or software techniques and
- Developing measurement-, process-, detection-, probing- or imaging methods for scientific purpose.

Selected projects will be supported by grants of up to SEK 10 million for three years, in total, including overhead (maximum 25% on the direct costs), to be used for costs specifically connected with the instrument, technique or method development proposed. The Foundation seeks to encourage projects of high risk/gain. Applicants are strongly recommended plan for a head start of their projects, including for purchases, procurements, recruitments, laboratory space, etc. After the project's first year of operation, we will evaluate the progress and success prospects of each project. The second half of funding will be conditioned upon a positive outcome of this evaluation.

Exclusions

The Call is *not* directed toward projects that are primarily concerned with using (new) methods and instruments in research. Development should be innovative and *not* incremental. Nor should it comprise a lesser part of an existing research and development initiative. Building or development of institute test beds are *not* eligible in this call.

The Call is also *not* directed towards a project that has as a primary purpose to support the main applicant's own disciplinary research, but to enable (other's) future research with relevance and impact to present or future Swedish-based industry, university, and society.

Faculty staff (professors, lecturers, assistant professors, and persons on a tenure track) are *not* eligible to apply in this call. Furthermore, approved main applicants in the SSF-calls ITM17, RIF21, and FFL-8 are *not* eligible to apply for an ITM24 grant.

Eligibility

Proposals may be submitted by applicants who are research engineers, non-faculty researchers, staff scientists, PhD's, and Post-Docs that are committed to the project during the entire grant period. The main applicant must be employed more than 50% by a Swedish university, university college or university hospital, which will also be the administrating organization of the grant.

The proposal budget should be in the interval of SEK 6-10 million for a period of 3 years.

Project participation from industry, public authorities, or other relevant organisations (for example public or private non-profit research institutes) and large research facilities will

be considered a merit. However, such participants may not be funded by the SSF grant but participate on their own budget.

A maximum of 25% of the grant may be used for salary for the applicant, and only to cover up to a maximum of 25% of the salary of the applicant. Project co-workers, such as other PhD students, postdocs, junior researchers and technicians or laboratory assistants, may be funded up to 100% of their salary.

Each applicant is allowed to be represented in only one application. Applicants holding the SSF-grants Research Infrastructure Felows - 2(RIF21), Instrument, Technique, and Method Development Projects 2017 (ITM17), and Future Research Leaders Generation 8 (FFL-8) are not eligible to apply in this call.

SSF aims to distribute grants evenly between application areas to obtain a strategic portfolio. Furthermore, SSF promotes equal opportunity between women and men.

Applications not conforming to the above conditions and exclusions will not be considered. It is the responsibility of the applicant to check the proposal for compliance with the rules before submission.

Proposal and submission

A complete application must contain, among other data specified in the portal, a clear purpose statement, a full description of the project plan, an explicit description on how the proposed development will meet the goals of this program, and full details of the relevant expertise of the participating personal. It should also contain a clear account of the strategic significance of the future research in the medium to long term, including a plan for potential utilization/exploitation efforts that should commence, in parallel with the research activities, from day one in the project.

Each proposal shall clearly describe the international state of the art within the area(s) addressed. It is also important for the proposal to provide a clear picture of the resources available and to demonstrate that the proposed constellation of research groups will be effective in meeting its objectives.

In addition to the quality of the proposed project, the practical technical, administrative and management support during the project time must be specified in in the application (e.g., procurement, hiring of staff, senior/mentoring support). This must also be presented in the Lol.

A Letter of Intent (LoI) from the Head of the applicant's department is compulsory. Additional LoI:s may be required if the main applicant is partly employed by a different organisation ("secondment") during the application period and throughout the project period. In case the project involves large-scale research infrastructure, centralized research laboratories, etc., a certificate from that organization is also required, providing permission to access and use the facilities for needs of the project.

The proposal must be written in English and submitted via the SSF portal at: http://apply.strategiska.se. Note that a complete description of all data required for submission is obtained by viewing the portal. Please log on to the portal well in advance of the deadline. Please also submit the application in due time before the deadline. When

the application is submitted, the system will reject it if some data fields are missing. If this is done before the application deadline; it is possible to submit and re-submit multiple times.

All applications must be submitted by 14:00 hours (2:00 pm CET) on March 25, 2025.

No material will be considered after this deadline.

Please note that the Foundation is subject to the Principle of Public Access to Official Records (*Offentlighetsprincipen*). Thus, applicants should avoid submitting material that they do not wish to be made public, for example information that could obstruct patenting.

Evaluation

Applications will be assessed by an evaluation committee consisting of generalists and specialists from industry and academia.

The applications will be reviewed using the following criteria:

- Conformity to the scope of the Call, as defined in this document.
- Strategic relevance, and potential impact of the proposed project to Swedish university, industry or society, including utilization/exploitation plans.
- Technological and scientific quality; originality/innovativeness and feasibility of the project plan for developing the intended instrument, technique or method.
- Qualifications of the applicants, previous achievements (technological and entrepreneurial), and networks. Length of publication list and impact factor will not be determining factors.

Timetable

Announcement of Call: October 2024

• Deadline for applications: 14:00 CET, March 25, 2025

Decision by the SSF Board: November 2025

Project start: 1 January 2026

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