Proof of Concept Grants in Materials Science for Sustainability

The purpose of the Knut and Alice Wallenberg Foundation Proof of Concept Grant is to bridge the gap between academic research and innovations in Material Science for Sustainability. The grant gives researchers the opportunity to develop their early-stage discoveries towards validated methods, products, or processes. The grant is intended to accelerate the development of the project with focus on preparing research ideas for innovation and commercialization.

The Proof of Concept grant gives the proposing scientist(s) the opportunity to answer remaining scientific questions to enable a successful advancement of a research idea or discovery towards commercialization.

The Proof of Concept grant is not a translational academic research grant, but is meant to support a specific goal-oriented project to develop an academic discovery towards an innovation and a product. Hence, the grant can support translational research with a clear product-oriented thinking and/or a defined goal at the end of the two-year period.

The approved funding for each project is suggested to be between 1 and 4 million SEK, over a project period of maximum two years. The grant will be paid directly to the researcher's university and the use of the grant must comply with the university's regulations and the specific terms and conditions of the grant, as stated by Knut and Alice Wallenberg Foundation (KAW).

The grant cannot be used for covering the costs of patent applications or patents. The Proof of Concept grant is tied to the Wallenberg Launch Pad (WALP) mechanism (see below) that provides support for academic scientists to develop innovations that have the potential to make an impact in society.

Application period

Call opens: 2 September, 2024
Call closes: 11 October, 2024 at 13.00.

 This is a yearly call.

Who can apply?

Scientists that are eligible to apply for this grant must be employed at a Swedish University and have or have had grants from the Wallenberg Foundations under the following instruments:

- — Wallenberg Academy Fellows
- — Wallenberg Scholars
- — Wallenberg Clinical Scholars
- — PI and Co PIs in KAW projects

Or are grant holders in KAWs strategic initiatives:

- — Wallenberg Initiative Material Science for Sustainability (WISE)
- — Wallenberg Wood Science Center (WWSC)
- — Wallenberg AI, Autonomous Systems and Software Program (WASP)
- — Wallenberg Centre for Quantum Technology (WACQT)

KAW and WISE strive for excellence in research, and are committed to the principles of diversity, equity, and inclusion. Thus, applications are encouraged from all eligible individuals who wish to further translate their research findings into society.

Application instructions

General information

The application must contain a project title, funding applied for and purpose. It shall describe the applicant's affiliation and eligibility, as well as a project description. The project shall have a sound scientific basis in the applicant's field of materials research. The project description (see format below) must state the academic research finding that is being proposed as an innovation, including the aims to be achieved by the Proof of Concept grant, the applicant's experience and the potential to develop breakthrough innovations in the field, and the project's position in a global perspective. It must be explained how the research results will be utilized and what specific problem the project addresses. It shall be made clear how this Proof of Concept funding will help to bridge the academic discovery towards making an impact in society and its value as an innovation. The project application must include a clear motivation, stating how the research impacts sustainability in a long perspective.

Special emphasis must be placed on describing how the scientist intends to verify the usability and suitability of a new method, product or process developed from research, as well as activities that prepare this for innovation or commercialization. The proposed project shall be described in a work package format, including the purpose, clear milestones/deliverables and how it adds innovation/commercial value. The innovation and commercial value can for example be described by the expected advancement of the readiness level during the project, or how technical development risks are decreased. ([Please use the readiness level definition here](#)) The applicant should also reflect on the possible future outcome after the project and ideas on how to take the next steps, to commercialize the research idea.

If the applicant(s) is engaged in a company that is relevant in the field of the innovation, this must clearly be stated. The grant cannot be paid to a company and is not intended for supporting research and innovation activities in an already funded company. The applicant may, however, be eligible to receive support for other innovations in the academia, outside the scope of an existing company, if any conflicts are clarified and disclosed.

Only one application per Principal Investigator will be considered.

Application documents are treated confidentially.

The materials science area(s) of the application shall be specified by a combination of Research area and Thematic area. At least one from each category below must be specified. The Research and Thematic areas are described in more detailed at [WISE website](#).

Research areas:

- Design and modelling
- Synthesis and processing
- Structures
- Properties
- Performance
- Materials characterization

Thematic areas:

- Energy
- Circularity and Replacement
- Climate and Environment
- Discovery

Application details

Application shall be submitted through the KAW-portal, which will be available when the call opens.

The following parts are mandatory and must be uploaded in the portal:

- **Project description and plan** (see below)

- **One-page project pitch** (Need/Benefit/Competition/Approach) incl WPs (in bullets), time and budget plan. Please use the last paragraph to describe the desired outcome after PoC project completion in relation to where you are today (i.e. how will the PoC project mature your solution) and the future steps towards commercialization (maximum 1 page)

- **Complete budget** (university) based on the template at https://kaw.wallenberg.org/anslagsguide/blankettarkiv (Please note that IP protection or market analysis cannot be covered by the grant)

- **CV** containing education, positions, awards, patents (if any), entrepreneurial merits (if any), bibliometric data, e.g. link to google scholar, as well as a list of the ten most significant publications published in peer-reviewed journals. If there is more than one person applying include all in the same CV file (maximum 2 pages)

- **Certificate** from the head of department to verify that they will accept the donation and accept that a maximum of 20% of the amount can be used for indirect costs and rent.

- **Verification of interest** from external party(ies)

The **Project description and plan** shall be maximum 10 pages, including pictures and references and written with Times 12 with one and a half line spacing. The number of pages in

parenthesis after each section is a recommendation, most important is that the total number of pages do not exceed 10 pages. The topics below must be addressed in the following order:

Title page including applicant's name and eligibility/relationship to KAW and/or WISE (1 page)

Describe the need: Which problem does your solution address? Who needs the solution? Who (potential commercial partner, investor, end user) has shown interest in your solution, and what do they find is still missing for them to fully engage? (2 pages)

Describe the benefit: What is the benefit and expected commercial value of your project? How would this PoC project validate, further develop, and mature your solution? (1 page)

What is the competition: Is there similar research, potential competitors or next-best solutions which could change the market predictions? What is your first estimate of potential and addressable markets worldwide and in Europe, based on desktop research? (1 page)

What is the impact on sustainability: How will the proposed research idea (and potential outcome) substantially contribute to a sustainable solution? (1 page)

What is your approach: Research background and current status of the idea (maximum 5 publications to be used as references). (4 pages) Please, make sure to describe the following topics;

- Description of the project, highlighting the novelty.
- Detailed description of the proof of concept, e.g. the demonstrator, synthetic route, material or software you would like to build, how to validate it and the work packages needed. For each WP, state the purpose, aim, and how it adds innovation/commercial value.
- How will your final product be applied in a market setting?
- Where in the value chain will the outcome of your research be placed (materials supply, production, product)?
- How have you or how will you plan to protect your intellectual property (patents, trade secrets, agreements?), secure ownership and right to exploit.
- Which regulatory requirements, if any, will apply to your project and how will you address them?
- Please provide an overall time plan indicating milestones and WP deliverables incl cost and the team required.
- How sustainability of the product/process/method will be approached in the project work and how sustainability aspects will be monitored.

Evaluation

Process

All applications are kept confidential throughout the process. The evaluation of submitted applications takes place in two stages. First, the applications are evaluated by a panel of experts appointed by WISE and KAW who will score and prioritize the top applications. The second stage will take place in the KAW foundation's innovation tool, the Wallenberg Launch Pad (WALP). The WALP phase 1 is centred around personalized innovation coaching, where the researcher further deepens the scope of the project in preparation for the WALP pitch. The final

decision on approval of the grant is taken after the WALP pitch by KAW representatives. Hence, some applicants who are invited to the WALP coaching process, may not eventually get the Proof of Concept financial support.

Project proposals are submitted to KAW and funded by KAW. WISE-chosen experts provide advice and support in the evaluation process. No government funds are used for the Proof of Concept grants.

Evaluation criteria

- Does the proposed innovation solve a persistent and important problem?
- Is the potential solution well defined?
- Is the potential solution novel and unique?
- Is the potential solution a sustainable solution?
- Is there interest from external partners?
- Is the intellectual property (IP) protected and/or is there a plan for protection?
- Is the Proof of Concept project and its milestones well defined and relevant?
- Is the proposed team adequate?
- Is the time plan and budget realistic?

Important dates

September 2	Call opens
September 5	Webinar and Q&A
October 11 at 13.00	Call closes
End of December 2024	First review decisions sent out to applicants
Jan-April 2025	WALP Phase 1 and WALP pitch opportunities
May 2025	Last WALP grant decision

Questions

Join the online webinar to learn more about the call on 5 September (see link below)

For questions or feedback regarding the call, please contact WISE program office info@wise-materials.org

IMPORTANT: Do not send any information that is sensitive or confidential or contains details about the content of the application.

Useful links

- KAW application portal (to be published)
- [KAW budget template](#)
- [Readiness level guide](#)
- [WALP homepage](#)
- [Privacy policy](#)
- Webinar on upcoming call (to be published)
- [Q&A](#)

Further Information

[General information about WISE](#)

info@wise-materials.org