



Wallenberg Initiative Materials Science for Sustainability

Call for WASP-WISE Pilot projects 2024

Updated 2024.10.01 (Version 2024.09.09)

Application deadline 2024-11-08, 14:00

1. Aim and scope

The aim of the call is to initiate collaboration between WASP and WISE researchers in the areas of AI, autonomous systems and software combined with material science for sustainability. Proposals shall be within both WASP and WISE scientific areas. Project shall be based on a joint research plan, including one Principal Investigator (PI) at WASP and one PI at WISE. The PIs eligible to apply, one from WASP and one from WISE, are defined under "Who can apply".

Wallenberg AI, Autonomous Systems and Software Program (WASP, https://wasp-

sweden.org/) is Sweden's largest individual research program and provides a platform for academic research and education, fostering interaction with Sweden's leading companies and other actors. The program addresses research in artificial intelligence, autonomous systems, and software as enabling technologies for developing systems acting in collaboration with humans, adapting to their environment through sensors, information, and knowledge, and forming intelligent systems of systems. WASP strengthens, expands, and renews the national competence through strategic recruitments, a challenging research program, a national graduate school, and collaboration with industry and society. WASP aims at increasing gender balance and building a culture based on inclusion and diversity. The program is conducted in close cooperation between leading Swedish universities to promote the competence of Sweden as a nation within the area of AI, autonomous systems and software.

Wallenberg Initiative Materials Science for Sustainability (WISE, https://wise-

materials.org) is the largest-ever investment in materials science in Sweden and encompasses major efforts at Sweden's leading universities over the course of (at least) 10 years. The aim is to create the conditions for a sustainable society by researching the next generation of ecofriendly materials and manufacturing processes. This will also facilitate better technology for energy systems of the future, and to combat climate change, pollution, and toxic emissions. Specifically, efforts will be devoted to identifying new or significantly improve materials, which provide a distinct advantage in physical, chemical, biological, or functional performance when compared to existing materials and technologies. This relates to materials that demand fewer resources, are less environmentally hazardous, and enable sound and efficient recycling processes. WISE will also explore materials that, when used in energy technology, generate less negative climate impact under operation, while offering high performance and efficiency when in action at large scales.





2. Who can apply?

This call is open for academic researchers at WASP's and WISE's partner universities and Affiliated Groups of Excellence as specified below.

A project shall be jointly led by one PI of the WASP community that is eligible to apply for projects and one PI of the WISE community that is eligible to apply for projects. A PI can be involved in only one application in this call.

The WASP PI must be employed at one of the WASP partner universities, Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Umeå University or be part of one of the Affiliated Groups of Excellence at Örebro University, Uppsala University or Luleå University of Technology.

The WISE PI must be employed at one of the six WISE partner universities, Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Stockholm University, and Uppsala University, or with Luleå University of Technology, or be part of one of the affiliated groups of excellence at Karlstad University, Umeå University, and Örebro University.

The WASP and WISE programs aim to achieve an overall gender balanced outcome, and possibly so also in every project.

3. Budget

The project budget shall be 1 MSEK, total budget (WASP + WISE) for a project duration of 1 year. 10 projects are expected to be funded within the total budget for the call. Each proposal shall contain a project budget specifying the expected project costs, according to template. The distribution between the WASP and WISE budgets shall be 0,5 + 0,5 MSEK.

4. Use of funding

• Use of funding is flexible but must be motivated and specified. Eligible costs according to KAW budget template.

The following applies to the WISE Program (KAW donation letter 2021.0312)

- Salaries can include a maximum of 50% LKP (lönekostnadspåslag/social fees)
- Overhead costs are covered with a maximum compensation of 21,95% divided as 18.45% for indirect costs and 3.5% for premises costs.

The following applies to the WASP funding (KAW donation letter 2023.0462):

• Salaries can include a maximum of 52,5% LKP (lönekostnadspåslag/social fees)





• Overhead costs are covered with a maximum compensation of 25% divided as 20% for indirect costs and 5% for premises costs.

5. Evaluation criteria

Projects will be evaluated considering scientific excellence and impact from a materials science for sustainability perspective as well as from an AI, Autonomous Systems and Software perspective, alike. Specifically, the following criteria will be used:

- Scientific Quality
- Novelty and Originality
- Scientific merits of the applicants, considering academic age
- Synergies in the planned collaboration
- Feasibility
- Significance of how the proposed project contributes to sustainability.
- Industrial and societal relevance

Important aspects that will be considered are:

- Diversity of age and gender of the applicants
- Open science and data sharing aspects
- Impact on WASP-WISE community

6. **Proposal structure**

The proposal must be composed in Times New Roman font, 11 pt, single-spaced text, margins 2,5 cm and be structured as follows:

- Name of the project
- Names and affiliations of the two PIs
- Project Summary (max ½ page)
- Project plan (max 2 pages, excluding references) with clearly specified subject area and focus including:
 - challenges
 - work plan, including forms of collaborations
 - expected results
- Budget description and motivation of project costs
- Project budget shall be made in KAW budget template and the summary page ("1. Sammanställning") for each program shall be submitted in the application. (<u>https://kaw.wallenberg.org/anslagsguide/blankettarkiv</u>)





- Explanation of the collaborative benefits and the role of each of the PIs and possible other participants (max 1 page)
- Short CV and top publications for the two PIs (max 2 pages each)
- Commitment letter from hosting university, should be signed by the Head of the Department.

7. Submission

The proposal shall be submitted as a single PDF file to <u>the submission portal</u> no later than **2024-11-08**, **14:00**.

8. Timeline

- 2024-09-09 Call opens
- 2024-11-08 Call closes **14:00**
- Feb 2025 Decision of accepted projects communicated
- 2025-04-01 Desired project start
- 2025-06-01 Latest project start