Call for WISE Industrial Doctoral Student and Postdoc Projects (WISE-ip3)

Version history
Version 1.0 15 April 2026
Sentences or text elements revised since the immediately preceding version are highlighted in yellow.

Application deadline

2027-06-xx at 14.00

The Wallenberg Initiative Materials Science for Sustainability (WISE, https://wise-materials.org) is the largest-ever investment in materials science in Sweden and will encompass major efforts at Sweden's foremost universities over the course of (at least) 10 years. The aim is to create conditions for a sustainable society by researching the next generation of sustainable 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 improved 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 and less resources, are less environmentally hazardous, and enable sound and efficient recycling processes. WISE will also explore materials that are relevant for energy technologies that will reduce negative environmental impacts.

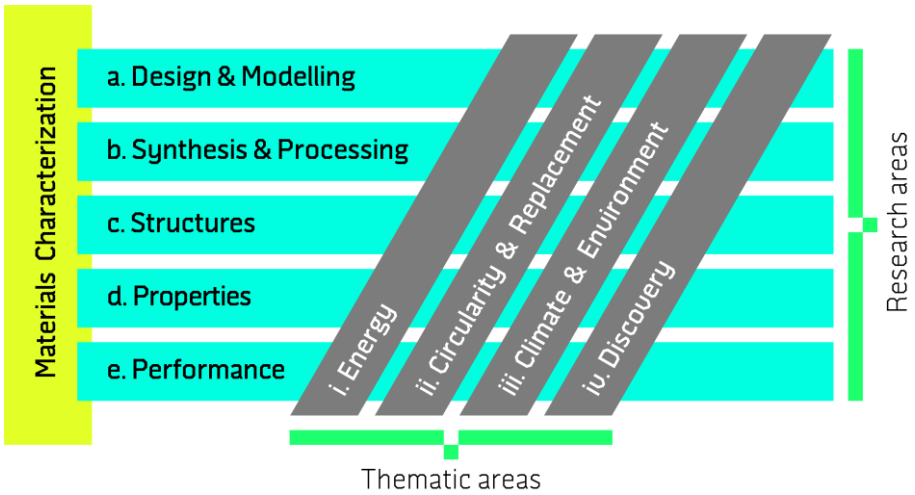

Figure 1 The WISE matrix

In this call, WISE is offering funding for up to 11 industrial doctoral student positions and up to 8 industrial postdoctoral researcher positions. The call refers to basic and need-driven research. Proposals in all areas of WISE are welcome. That is, proposed projects should be easily identifiable in the "WISE program matrix" (see Figure 1). Proposals are for a single PhD student or single postdoc researcher.

WISE has the aim to promote a wide coverage of PhD and postdoc projects spanning the WISE matrix and with supervisors at different stages of academic seniority. WISE welcomes applicants with different backgrounds, experiences, and perspectives – diversity enriches our work and helps us grow. Preserving everyone's equal value, rights, and opportunities is a natural part of WISE.

Your project should clearly comprise both excellent materials science and impactful contribution to a sustainable future. Furthermore, it is mandatory for applicants to use a methodology to cover and integrate sustainability aspects of the proposed research in the preparation of the application: for instance, the WISE ASSIST tool.

Eligibility

This call is open for partnerships between academic and industrial researchers, where each proposal must include a main academic PI as well as a main industry PI.

The academic PI (with qualification to be main supervisor according to the respective university) must be employed ≥50% at one of WISE's seven partner universities, Chalmers University of Technology (CTH), KTH Royal Institute of Technology (KTH), Linköping University (LiU), Lund University (LU), Uppsala University (UU), Stockholm University (SU), and Luleå University of Technology (LTU), or be a **pre-selected researcher** (employed ≥50%) with any of the affiliated groups of excellence at University of Gothenburg (GU), Karlstad University (KAU), Umeå University (UmU), and Örebro University (ORU).

The industry PI must be employed with a Swedish company or company with substantial activity in Sweden. See further criteria below in the section titled Evaluation.

If you currently have WISE-funded activities, your proposal should demonstrate significant novelty in comparison to your previous activities.

Evaluation

Project proposals will be evaluated by a panel comprising members of the WISE University Representative Group, the advisory committee, industry, and internal or external sustainability experts. The panel will generate a list for the WISE Board to make final decision.

The evaluation criteria that will be used for evaluating the project proposals are:

Project

- **Relevance to WISE** (contribution to the program and placement in the WISE matrix)
- **Scientific excellence and novelty** of the proposed research
- **Relevance and significance** of how the proposed project contributes to **sustainable development**.
- **Feasibility**
- Potential to collaborate with other WISE projects or initiatives

PhD student or postdoc

- In case of PhD student project, Master's or Bachelor's degree, including grades, and (if applicable) scientific merits and relevant industrial experience.
- In case of postdoc project, a PhD degree and scientific merits, taking into account academic age and relevant industrial experience.
- The application must include an identified candidate. The candidate must be employed in a permanent position (or equivalent role) by the applying industry no later than by the WISE Welcome Meeting 2028 (tentatively scheduled for August 2028).

Industry and industrial PI

- Industrial partner's financial and operational conditions to actively participate in the project. This includes:
    - Number of employees (both total people and full-time-equivalents)
    - Number of employees who could reasonably act as industrial co-PI (in cases where main industry PI is not available)
    - Assurance that the proposed WISE-funded PhD student or postdoc is not also the CEO, CTO, or equivalent during the project period
- The industrial partner should have considerable activity in Sweden.
- Merits of the industrial PI (academic degrees, publications, patents, management/ leadership experience, etc.), experience with collaborations with academia, and experience in sustainable development.

Academic PI

- Academic degrees)
- Scientific merits, taking into account academic age
- International research experience
- Pedagogical skills and merits
- Ability and experience to collaborate with academia and industry

Doctoral student/postdoc and supervisor constellation with underrepresented gender are encouraged.

Proposal structure

The proposal should be composed in Times New Roman font, 12 pt, single-spaced text, margins 2.5 cm, and be structured as follows:

- **Project Description (max. 4 pages,** references can be added beyond the page limit**)**
    - Motivation, Significance, and Scientific Challenges
        - Include a clear description of the visions and goals, the distinguishing features, and foci
        - Include a motivation for why a doctoral student or postdoc is most appropriate for the proposed project
    - State of the Art
    - Scientific Approach, Methodology, and Novelty
        - Describe the research contribution
    - Preliminary and Previous Results
        - Include results from previous related projects, if applicable.
    - Research Environment and Supervision (time should be spent at both university and in industry, see Appendix 1: Doctoral and postdoctoral studies in the WISE program)
        - Description of research environment and infrastructure (demonstrating feasibility of the proposed project)
        - Research supervision plan (for PhDs) and/or career development plan (for postdocs)
        - List of key collaborators and their roles for the project, if applicable, potential to collaborate with other WISE projects or initiatives
        - Brief description of the financial status of the participating industry during the project period (*i.e.*, over 2- or 4-year range for postdoc or PhD project, respectively) (max. ~200 words)

- **Relevance to WISE (max ½ page,** references can be added beyond the page limit**)**
    - Select main WISE thematic area i-iv (see Figure 1)
    - Select main WISE research area a-e (see Figure 1)
    - Include a detailed explanation of primary (and possibly secondary) focus in the WISE research areas (a-e) and thematic areas (i-iv) (see Figure 1).

- **Relevance and Significance of Sustainability Aspects (max. 2 pages**, references can be added beyond the page limit**)**

  Besides integrating sustainability in the project description, a *stand-alone* text should include:

  - A short introduction summarizing the proposed material science.
  - Brief presentation of the sustainability methodology/methodologies[1]
  - Sustainability Aspects and Impacts
    - Description of the sustainability aspects addressed by the project, including how these relate to the UN Sustainable Development Goals (SDGs) from a materials science perspective as highlighted by the WISE program's guidance "Sustainability considerations for excellent materials research conducted in WISE").
    - The description should include a reflection over advances/advantages as well as potential sustainability-related drawbacks or trade-offs with respect to the materials used or potential application developed. Below are some examples (in line with WISE Assist) to consider:
      - Sourcing of materials
      - Material criticality
      - Resource efficiency
      - Enabling circularity
      - Environmental pressures
      - Environmental and societal risk factors

      When applicable, need for further studies with respect to scaling or quantitative assessment could be described.

- **In case of PhD project: CV of the PhD student candidate (max. 2 pages,** the publication list can be added beyond the page limit**)** including:
  - Grades from Masters or Bachelors degrees
  - Periods of leave (parental, health-related, etc.), if applicable
  - Scientific merits
  - List of publications (if applicable)
  - Link to Google Scholar profile or similar (if applicable)
  - If applicable, relevant industrial experience
  - If applicable, describe any conflicts of interest[2]

- **In case of postdoc project: CV of the postdoc candidate (max. 2 pages,** the publication list can be added beyond the page limit**)** including:

[1] This applies both to how the proposal was prepared and how the project will be carried out.

[2] Conflicts of interest could include, for example, any financial or personal dependencies between the company, the scholar, the higher education institute, or the supervisor(s)/PI(s).

- PhD year
- Periods of leave (parental, health-related, etc.), if applicable
- List of past and ongoing projects in industry and academia if applicable
- (Optional) Short descriptions of utilization, commercialization, outreach, pedagogical, or other activities of relevance
- List of publications (5-10 selected publications)
- Link to Google Scholar profile or similar
- If applicable, describe any conflicts of interest[2]

- **Letter of intent from the company, if applicable.**
  - The PhD student candidate or postdoc candidate must be identified, but at the time of proposal submission not necessarily employed at the applying industry. In case the candidate is not yet employed, include a letter of intent from the industrial partner to support the intention and timeline to employ the candidate.

- **CV of the industrial PI (max. 2 pages,** the publication list can be added beyond the page limit**)** including:
  - Name, title, position, and affiliation
  - Education, academic degree
  - Experience and expertise in sustainability of relevance to the proposed project
  - Brief overview of projects, responsibilities, and previous interactions with academia
  - Brief statement of management/leadership/supervision experience
  - If applicable, describe any conflicts of interest[2]
  - Appendix may include:
    - (Optional) List of max 10 publications of relevance (no time limit)
    - (Optional) List of patents
    - (Optional) Link to Google Scholar profile or similar

- **CV of the academic PI (main supervisor) (max. 2 pages,** the publication list can be added beyond the page limit**)** including:
  - Name, title, and affiliation
  - PhD year
  - Previous positions (and relevant supervisors)
  - Periods of leave (parental, health-related, etc.), if applicable
  - List of ongoing grants/projects
  - (Optional) Short descriptions of utilization, commercialization, outreach, pedagogical, or other activities of relevance, like in sustainability
  - Number (not name list) of current and number of former PhD students, postdocs, and master students

- List of 10 publications including:
  - 5 most important publications (during past 15 active years)
  - 5 recent publications most relevant for the proposed project (during past 7 active years)
- The PI should provide relevant bibliometric data and additional excellence markers of relevance to the proposed project.
- Link to Google Scholar profile or similar
- If applicable, describe any conflicts of interest[2]

Responsibilities (for academic recipients)

Academic recipients of awarded proposals (*i.e.*, applicant/ supervisor) will become WISE faculty members and are expected to be engaged in the WISE program, including, *e.g.*, attendance at WISE workshops and events, ensuring that WISE-financed PhD students and postdocs are members of WISE Research School, use WISE affiliation and acknowledge WISE and KAW in publications, conference presentations and in relevant communication channels, as well as submit requested reports to WISE Program Office. In addition, WISE expects that recipients of project funding from WISE are committed to maintaining an updated ORCID account.

Industry recipients of awarded proposals (*i.e.*, applicant/ supervisor) will also be invited to WISE events and are expected to submit requested reports to the WISE Program Office.

Funding

Participating parties are expected to co-finance the project to the extent necessary for implementation. The industry's co-financing is part of the financial report.

Note that all payments happen retroactively. The first payout could be up to 9 months after the project's starting date.

PhD student project

To applying industry

- In total 2.4 MSEK for a PhD student, paid out in lump sums every year[3] for a time period of 4-5 years (corresponding to an activity level in the range 100-80% respectively).

To the host university

- Salary (including 52.5% social fees) for supervision up to 10% of full-time salary for 4 years during maximum 5 years.
- Costs for travel and consumables will be covered up to 10 kSEK/year (total 40 kSEK)
- The costs include a maximum of 5% surcharge for premises and a maximum of 20% surcharge for indirect costs.

[3] 600 kSEK/year at 100% activity grade.

Postdoct project

To applying industry

- In total 1.9 MSEK for a postdoc, paid out as a lump sum of 950 kSEK/year for 2 -2.5 years (corresponding to an activity level in the range 100-80% respectively). If an SME[4], in total 2.4 MSEK for a postdoc, paid out as a lump sum of 1200 kSEK/year for 2 -2.5 years (corresponding to an activity level in the range 100-80% respectively).

To the host university

- Up to 300 kSEK in total (during two years) to cover salary cost for one host, travel costs for the host and consumables.
- The salary include a maximum compensation of up to 52.5% for social fees (LKP).
- The costs include a maximum of 5% surcharge for premises and a maximum of 20% surcharge for indirect costs.

More information about the doctoral studies in the WISE program and the duties of WISE postdoctoral research fellows can be found here (link to Appendix 1: Doctoral and postdoctoral studies in the WISE program).

Submission

The proposal should be submitted as a single PDF file to the submission portal: (link to the submission portal will be provided later).

Timeline

2026-04-20	Call text available
2027-04-xx	Application portal opens
2027-06-xx	Call closes
2027-10	Decision of accepted projects communicated
2028-08-01	All candidates ready to start (individual decision can be made later)
2028-08 (preliminary date)	WISE Welcome Meeting 2028 (mandatory participation for PhD students and postdocs)

Public access and confidentiality of the applications

Both the applying university and Linköping University (LiU) are subject to the principle of public access to official documents. A summary of the related laws and regulations is given here.

[4] The EU definition of an SME can be found at SME definition - Internal Market, Industry, Entrepreneurship and SMEs.

Appendix 1: Doctoral and postdoctoral studies in the WISE program

The WISE Research School (RS) is dedicated to providing the skills needed to analyze, develop, and contribute to the interdisciplinary area of materials science for sustainability. Through an ambitious program with research visits, workshops and meetings at the partner universities, and visiting lecturers, the RS actively supports forming a strong multi-disciplinary and international professional network between PhD students, postdocs, researchers, and industry. RS provides added value on top of the existing PhD programs at the partner universities, providing unique opportunities for students and postdocs who are dedicated to achieving international research excellence with industrial relevance.

An industrial PhD student is enrolled at a partner university and will follow the university's curriculum for attaining their PhD degree. Together with WISE academic PhD students, the industrial PhD students will join the WISE Research School, where they are required to follow courses on materials science and sustainability in addition to their core program courses.

An industrial postdoc is a person with a PhD who conducts industrially motivated academic research in the context of a collaboration between a company and a university research group for two years full-time. The industrial postdoc is 100% employed by the company. An industrial postdoc could be ideal, for example, for recently graduated PhDs who are considering a career as an industry researcher or PhDs who are already employed at a company and engaged in research tasks.

Industrial PhDs and postdocs are expected to be active in the WISE program, including, e.g. attendance at WISE workshops and events; active membership in the WISE Research School; using WISE affiliation and acknowledgement of WISE and KAW in publications, conference presentations, and in relevant communication channels; and submitting requested reports to the WISE Program Office. In addition, WISE expects that recipients of project funding from WISE are committed to maintaining an updated ORCID account for publication tracking.

The activity level should be in the range 80% to 100% corresponding to a duration of 2 to2.5 years (postdoc) or 4 to5 years (PhD student). Both industrial PhDs and postdocs are fully engaged in academic research during their project work time but share their time between industry and university. For an industrial PhD, a minimum of 20% working time should be spent at both university and industry, respectively. For an industrial postdoc, 20-50% of working time should be spent in industry and 50-80% working time at university.