21st Call for proposals
for interdisciplinary Seed Fund Projects – thematic call:
Built and Lived Environment- Research for transformation

Background

The Exploratory Research Space @ RWTH Aachen (ERS) is the central instrument of RWTH to foster interdisciplinary research and to develop emerging fields with the potential to shape the University’s research profile. ERS comprises activities which give a leeway for creativity to both senior and junior researchers and which foster interdisciplinary exchange and discussion. One activity is the funding of Seed Fund Projects. The typical duration of a Seed Fund Project is 6 to 12 months.

1. Description of the research field

The Growth Area Built & Lived Environment (BLE) focuses on the need for integrated solutions to the built environment that take into account both, innovative technologies and approaches, and the social and spatial settings to be addressed. This should lead to a lived environment, which is more sustainable, climate-friendly, resource-conserving, and healthy.

Reducing harmful climate gases is a global challenge for society as a whole. Almost 40 % of global CO2 emissions are attributable to the operation of buildings and the construction industry. The construction industry is thus facing a fundamental transformation, which in Germany is described by the term “Bauwende”. This building turnaround will depend on research contributions. In this context, research must look beyond the material production of buildings, infrastructures and landscapes to their sustainable use in interdisciplinary collaborations. Transformation-oriented research also requires transdisciplinary approaches in order to create innovations based on actors, their applications, context and networks. In addition to these methodological challenges, the “Bauwende” leads to a reorientation in terms of content: Instead of new construction, the preservation and reconstruction of existing structures are getting highest relevance - a paradigm shift that requires the research and establishment of new patterns of thought and action.

RWTH is already addressing the transformation of constructed systems in a variety of ways, from materials science to production processes, energy and mobility issues to topics in civil engineering, architecture, and urban planning. Nevertheless, economic, socio-technical and health-related research can also make valuable contributions with regard to the transformation process.

Hence, the seed fund supports interdisciplinarity and networking, e.g., in the areas of:
- Durable, adaptable and recyclable building materials and structures
- CO2-saving manufacturing processes and recycling-friendly construction
- In-situ production of building materials and their architectural use
- Cross-scale solutions from components, buildings, quarters and cities to regions
2. Aim and thematic focus

The activities should be original, creative and can be of high risk. They must not already be addressed by national or international public funding programs.

Projects can also be submitted as **International Research Space@RWTH Aachen (IRS)** proposals. This entails additional funding for collaboration with international partners, who are expected to contribute to the project through matching funds (except in case of capacity building proposals). IRS proposals should elaborate the specific added value of the international cooperation.

3. Selection and evaluation criteria:

The projects will be selected and evaluated by an evaluation group. The selection process may involve external experts.

The selection criteria for submitted proposals will be

- Originality (new, creative, explorative),
- Interdisciplinarity (participation of researchers from different faculties and disciplines with strongly differing research topics),
- Subsidiarity (funding through other sources is not yet possible),
- Team structure (senior and/or high-potential young researchers),
- Potential impact on the research strategy and structure of RWTH Aachen,
- Adequateness of research approach,
- Adequateness of research data management plan.

Specifically for IRS:

- Coherent implementation of internationalization in line with **RWTH internationalization strategy**,
- Adequate matching funds from the partner (except for projects on capacity building),
- Added scientific value of the international cooperation.
Major evaluation criteria after project completion will be the quality of obtained research results and the future perspectives of the research topic as described in a final report, which has to be provided 18 months after project closure:

- A promising proposal for a follow-up project (to be) submitted for third-party funding (DFG, BMBF, EU, …),
- Publications in peer reviewed journals, books or monographs
- Granted patents or promising patent applications.

4. Funding
The budget for a Seed Fund Project is provided by the Excellence Strategy of the German Federal and State Governments and makes allowances to the allocation model aiming for 30% share of females. The total budget for all new Seed Fund projects is at most 265,000€.

Funding can only be provided for members of RWTH Aachen University.

Eligible costs are: Staff expenses including student assistants, travel and subsistence costs, support for workshops and conferences, consumables and equipment.

5. General conditions
Research Partners: typically 2-3 researchers, ideally from different faculties and disciplines.

We encourage the participation of young scientists (junior professor, group leader, research fellow, etc.) who are scientifically independent and are leading a research group.

The researchers should not be part of the same institute.

Joint Proposals with partners from Forschungszentrum Jülich (FZJ) are welcome. The research topics and the expertise of the FZJ partners must be different from those of the RWTH partners and they have to complement each other. The expenses of the partners from FZJ will not be covered by ERS funding.

Each research team (professor with his/her group) can participate in a maximum of 3 Seed Fund Project Proposals.

Progress evaluation: final report

6. Proposal structure and content
Length of proposal: 10 pages max., type size: Arial 11, line spacing: 1.5

- Project partners and principal investigators
- Summary
- Current State-of-the-Art
- Relevant preliminary work of the applicants
- Goals and approach (methodology)
- Working plan, including tasks, responsibilities and strategies for collaboration
- Financial plan
- Expected short, medium and long-term impact (targeted third-party funding, implementation of new scientific infrastructure, new significantly visible, interdisciplinary competences, action plan to achieve these strategic goals)
- Strategies for participation, communication and outreach
- Research data management plan
- References

Language: English or German

Please note: Proposals that do not comply with the formal criteria will be excluded from the reviewing process.

7. Deadline for submission: 14.11.2023

8. Project start: between March and April 2024

9. Project duration: 6 to 12 months

    Call: Built and Lived Environment

For additional information on the selection process, please refer to our website:
http://www.rwth-aachen.de/ers

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