

Call for HEiKA project proposals 2019

The Heidelberg Karlsruhe Strategic Partnership – Research Bridges (HEiKA), established as a collaborative research platform for the Karlsruhe Institute of Technology (KIT) and Heidelberg University, provides funding for small to medium-size joint projects that are characterized by outstanding scientific quality and high innovative potential. Entitled to answer this call are all scientists of KIT and Heidelberg University.

The call asks for project proposals thematically involved with at least one of the six [HEiKA Research Bridges](#) Advanced Imaging Platform (AIP); Functional Materials (FM); Medical Technology for Health (MTH); Particle Physics, Astroparticle Physics and Cosmology (PAC); Synthetic Biology (SB) and HEiKAexplore, topic: *Autonomous systems in the area of conflict between law, ethics, technology and culture*, (Appendix, page 5). The start of funding is 1 January 2020.

Objective:	Seed funding of joint projects
Target Group:	Scientists of KIT and Heidelberg University
Scientific Focus:	Thematic assignment to at least one of the six HEiKA Research Bridges .
Deadline:	September 4 th , 2019
Funds:	Maximum EUR 80.000 per joint project
Funding Period:	1 Jan – 31 Dec 2020

Objective

HEiKA funding aims at furthering the collaborative partnership between KIT and Heidelberg University by exploring complementary competences and specific strengths of both partner institutions to enhance competitiveness in selected fields.

Type of support

Start-up funding for scientific projects with a viable future perspective within a larger funding context (e.g. DFG, BMBF, EU) of up to **EUR 80.000** may be granted for a maximum of **12 months** (01.01. - 31.12.2020). In justified cases, the 12-month project duration can be extended by up to 6 months free of charge. Requests for this must be made informally, but no later than 2 months before the end of the original project term, to the HEiKA office.

Applying **junior scientists** (max. 6 years after PhD - plus parental leave if applicable) are offered to request funding for **up to 18 months** (01.01.2020 - max. 30.06.2021). Please note: The above mentioned period of 6 years after your PhD must not be completed during the run-time of the HEiKA project (a potential prolongation included).

Funds must be used in accordance with DFG guidelines. Recourses can be requested for personnel including student assistance (excluding the applicants own position), consumables, travel cost, support for project-related events, equipment and investments. Not eligible are expenses for building measures, teaching, replacement or repair of equipment, basic laboratory and office equipment (e.g. computers), postage costs and office supplies.

Target Group

Invited to apply are scientists of KIT and Heidelberg University. Proposals have to be submitted by two or more scientists holding a doctoral degree, at least one from each partner institution.

Applicant junior scientists are asked to present the contribution of the requested HEiKA project for the further development and sharpening of their own research profile in a short personal statement. Please submit this statement (max one page, DOC or PDF) together with your proposal. A pre-existing, documented collaboration is not a condition for a successful application.

Including an external partner into a HEiKA project proposal is possible in well-founded cases. Funding of external partners via HEiKA is not possible.

Project leaders of the ongoing grant period (2019) are not excluded from this call. An application for follow-up projects of running HEiKA projects is only promising, however, if it gives an already advanced joint initiative for the acquisition of larger joint projects a significant boost (e.g. accomplishing final joint research results to apply for a SFB-TR, EU or BMBF project).

Application Deadline & Submission

Applications must be submitted by **4 September 2019 (deadline)** by email to info@heika-research.de. Please submit applications as a Word or PDF document using our [HEiKA proposal form](#) (DOCX, 41 KB) and please be sure to keep the file size as small as possible!

Proposals may be written in German or English and should describe the project topic and aims, the anticipated outcome and comment on the connection to HEiKA objectives and the link to Research Bridges. Proposals must include a short work plan and a detailed budget plan for the whole project period (including a distribution of funds per partner institution) and milestones.

Applications submitted later or not in the form indicated will not be considered in the selection procedure. The funding will start on 1 January 2020.

Selection procedure

The funding decision is expected in the context of a **HEiKA selection meeting on 11 October 2019 in Karlsruhe**. For this purpose, after a pre-selection, the applicants for the best-reviewed project proposals will be invited to a discussion of their project idea to Karlsruhe. Immediately following these interviews, the final funding decision will be made.

Applicants selected to discuss their projects will receive an invitation approximately one week before the selection session; the final funding decision will be announced approximately one week after the selection meeting.

Miscellaneous

Unsuitable are proposals that have already been submitted to other funding agencies. By submitting the application you confirm that the application has not been entered for any other selection procedure.

Overview of the [projects](#) HEiKA has supported so far.

Summary

Objective:	Start-up funding of joint projects
Target Group:	Scientists of KIT and Heidelberg University
Scientific Focus	Thematic assignment of your project to at least one of the six HEiKA Research Bridges . For questions kindly contact the respective directors.
Deadline:	September 4th, 2019
Funds:	Maximum EUR 80.000 per joint project
Funding Period:	1 Jan – 31 Dec 2020 - the funding period for junior scientists applying might be prolonged up until 30 Jun 2021 – to indicate within the web form under 7. <i>Work Plan, Additional information concerning milestones</i> .
Cost:	Personnel, consumables, travel costs, project-related events, equipment and investment.
Submission:	Send your proposals by September 4, 2019 via email to info@heika-research.de (make sure to use the HEiKA proposal form)
Proposal Structure:	- Affiliation to HEiKA Research Bridges; project proposal (abstract/topic/aims/connection to HEiKA objectives & research bridges/expected outcome); milestones and budget plan; personal data of applicants (including short CVs, list of publication and preliminary work); contact data of project team members. - Please adhere to the character restrictions (including spaces) specified in different sections of the form.
Additional documents:	any annex must be submitted together with your proposal by email to info@heika-research.de - Junior scientists: short outline on the contribution of the submitted joint project to the advancement of their own scientific profile (1 page max, PDF or DOC).
Selection procedure:	- HEiKA Selection Meeting with interviews of the successful applicants will take place in Karlsruhe at October 11, 2019 - Save the Date!

Contact: HEiKA Office, Regine Kleber & María García, info@heika-research.de

Appendix: The HEiKA Research Bridges

From the founding stage of HEiKA, the largely complementary set-up and long-standing cooperation of the Karlsruhe Institute of Technology (KIT) with Heidelberg University have been two of the main criteria, leading to the establishment of six comprehensive key areas as the HEiKA Research Bridges:

Advanced Imaging Platform - AIP

The AIP establishes an integrated research program on advancing imaging methods including optical, electron and x-ray modalities. The platform also covers correlative approaches aimed at combining these modalities to extend the structural and temporal information that can be extracted from an individual sample under study.

Important aspects in the framework of the “AIP” are technical advances of the various imaging techniques, development of novel contrast agents, advancements of preparation techniques and image data processing software for the different imaging modalities and combinations thereof.

Functional Materials* - FM

Fundamental here are the optimal synergies between KIT and the University of Heidelberg in the area of production (synthesis) and structure determination of new materials, as well as the long-term cooperation in top clusters, such as "Forum Organic Electronics" as well as in the "Innovation Lab" with its associated cleanroom laboratory, as well as high-resolution electron microscopy at both locations.

Together with the Centre for Advanced Materials – CAM at Heidelberg University, which also focuses on the basic research of new organic materials and the MZE of KIT, the mapping of the entire value chain in the region will be further promoted.

HEiKAexplore

HEiKAexplore will address a new major topic each year, to encourage existing collaborations and foster new ones. All members of KIT and Heidelberg University are invited to contribute the selection for the annual topic by answering the specific HEiKAexplore call for topic outlines. This call will be published together with the annual HEiKA call for joint projects.

Current HEiKAexplore topic (2019): Autonomous systems in the area of conflict between law, ethics, technology and culture

In the Year of Science 2019 on Artificial Intelligence, it becomes particularly clear what significance this key technology has today and will play in the future. On the one hand, technological innovations, opportunities and challenges are moving into the social field of vision. On the other hand, there are legal, ethical, social and cultural issues.

The authors of the successful topic proposals are currently driving the development of the topic forward. For this purpose, a workshop is planned in June, to which we will invite you all as soon as the date is fixed.

Current information can also be found at www.heika-research.de.

Medical Technology for Health - MTH

The focus of this topic is the integration and synergy of knowledge from engineering and medical / clinical research to develop medical devices, systems and software for the prevention and (early) diagnosis of diseases for better therapy stratification.

We interpret “medical engineering for health” as being the application of methods from the areas of engineering sciences and bioinformatics in the field of medicine, often considering results of molecular basic research. Consequently, knowledge from these areas is combined with medical expertise aiming at better diagnostics, therapy and therapeutic management of patients.

This is comprising research and development of new diagnostic methods, medical devices, systems, algorithms and software, prostheses and implants for recognition, prevention, monitoring, treatment or relief of diseases, injury and disabilities.

Also research projects that strengthen the research oriented teaching in a future Master course in „Medical Technology“ are supported.

Particle Physics, Astroparticle Physics and Cosmology (PAC)

The activities comprise research topics in theoretical and experimental particle physics, astroparticle physics, astrophysics and cosmology. Both KIT and Heidelberg University have earned an excellent reputation in theoretical and experimental particle physics and astroparticle physics and both play leading parts in international experiments. The long lasting collaboration of both institutions in the conception of novel experiments, in computing, in data analysis and theoretical data interpretation shall be strengthened and their complementary competences be exploited. Representative examples would be the collaboration between experiment and theory in the conception of novel analysis techniques or research directions, for one, or the collaboration of physicists, engineers and computer scientists in the R&D of novel instrumentation techniques or large-scale data analysis and simulation.

Synthetic Biology - SB

Synthetic Biology is understood as the co-action of molecular biology, organic chemistry, engineering science, nano bio technology and information technology. The research bridge focusses on the development of new bio materials with functional surfaces, stem cell research and tissue engineering, re-engineering of signaling as well as modelling and supercomputing.