



ROYAL
ACADEMY OF
ENGINEERING

Frontiers of Engineering for Development

Seed funding

Applicant guidance notes

Applications open: 29 November 2019

Applications close: 13 December 2019

Project start date: 10 February – 9 March 2020

Project end date: on or before 9 March 2021

Project length: 12 months

Introduction

There is growing recognition that there is a need for interdisciplinary, challenge-based research at the frontiers of traditional disciplines to achieve real economic and social impacts and help meet global challenges. Frontiers of Engineering for Development seed funding aims to address this need by funding collaborative interdisciplinary pilot research projects.

Frontiers of Engineering for Development seed funding, is competitively allocated funding. We anticipate a 50% success rate for applications. This funding is only available to the participants of the Frontiers of Engineering for Development symposium. It aims to facilitate national or international interdisciplinary collaborations between attendees of the symposium, and supports pilot research that addresses global challenges.

Projects must be no longer than 12 months long and must start between 10 February and 9 March 2020. Projects must finish on or before 10 March 2021. Final reports will be due on 10 April 2021.

Award value:

UP TO

£20,000

Overview

GCRF OBJECTIVES:

Frontiers of Engineering for Development seed funding is awarded under the Global Challenges Research Fund (GCRF), a part of the UK government's Official Development Assistance (ODA). As such, collaborations supported by this programme must meet ODA requirements, and must:

- aim to promote the welfare and economic development of a country/countries on the DAC list of ODA recipients: <http://bit.ly/DACLIST>
- be designed to address a development need
- focus on a specific challenge affecting a developing country/region.

For further guidance on ODA compliance, please follow:
<http://bit.ly/ODAreq>

The research project must be interdisciplinary, pilot-stage and challenge-based research. The funding could support, but is not limited to:

- gaining preliminary data for a new project between two or more participants of a Frontiers of Engineering for Development symposium
- developing a further consortium or workshop between two or more Frontiers of Engineering for Development symposium participants, plus additional participants who did not attend the event
- Acquiring data by supporting graduate students to work within the research groups of two or more participants.

Monitoring

Awardees are expected to submit a number of progress reports. All monitoring, including the submission of documents and reports, is completed through the Academy's online grant management system.

- **Initiation report** – on or before 9 March 2020
- **Progress report** - six months after project start date
- **Final report** – 10 April 2021
- **Follow-up report** – 10 April 2022

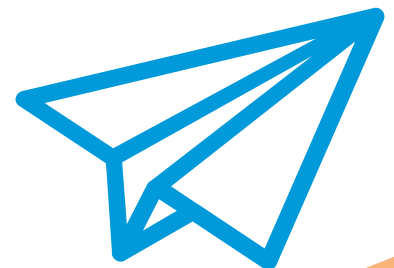
Diversity

The Royal Academy of Engineering is committed to diversity and inclusion and welcomes applications from all under-represented groups across engineering. It is the Academy's policy to ensure that no applicant is disadvantaged or receives less favourable treatment because of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender and sexual orientation.

www.raeng.org.uk/publications/other/academy-diversity-policy

Submission Deadline

The deadline for applications is **12.00pm (midday) UK time on Monday 13 December 2019**. Any incomplete or late applications will not be considered.



Eligibility criteria

This funding is to promote a new collaboration between Frontiers of Engineering for Development symposium participants. The activities can involve non-conference participants, but **at least two primary applicants must have attended Frontiers of Engineering for Development in November.**

- The project must comply with the ODA requirements: <http://bit.ly/ODAreq>
- The project must be interdisciplinary
- Pre-existing collaborations are NOT eligible

Lead applicant person specification

- **The lead applicant must be hosted by a UK university.** They must have attended the Frontiers of Engineering for Development symposium in November.
- The lead applicant must be employed by a UK university.
- They should be at an early- or mid-career stage, usually 0-20 years postdoc. In most cases, they will not yet have reached professorship. Consideration will be given to those who have taken a non-standard career path or career break.
- More established researchers can be involved in the project but will often take an advisory position. Therefore, we expect the lead applicant to be the researcher who will undertake a majority of the project work.

Please contact [Sima](#) Majernikova if you have any questions regarding your eligibility: Simona.Majernikova@RAEng.org.uk

How to apply

The application form has **five main sections** and should take approximately one hour to complete, assuming you have written your answers to the questions offline and merely need to enter the information rather than compose it.

The lead UK applicant will need to provide a letter from the appropriate Research Grants Office confirming the application is approved – details of this letter can be found in section focused on support and declarations. It is recommended that you approach all necessary personnel as soon as possible. Due to the tight timelines for this application process, it is advised that you forewarn the relevant individuals, even before the event where possible.

- 1. Applicant and institution details**
- 2. Project details**
- 3. Challenge details**
- 4. Goals, objectives and outcomes**
- 5. Support and declaration**

At any stage in the application process you can save your progress and return to the application at a later time. You can answer the questions in any order you like so it is possible to skip some sections and return later.

All applications must be submitted via the Academy's online application system at <https://grants.raeng.org.uk>

The lead applicant must first register with the system and provide some basic log-in details to create a profile.

After logging in to the online system and selecting 'Frontiers of Engineering for Development – seed funding' you should be presented with the 'Instructions' screen. Here you will see some general instructions on how to use the system as well as the following list of the five sections of the application form:

Questions:

1. Applicant and institution details

Please provide details of collaborators and their respective institutions involved in this project.

	Question	Information
1	Please provide contact details of the lead and co-applicant(s)	These are the details we will use to contact the leading applicants. The lead applicant must be from a UK university, and fit the person specification outlined above. At least two of the lead and/or co-applicants must have been at the most recent <i>Frontiers of Engineering for Development</i> event.
2	Collaborator contact details	Please provide details of every collaborator participating in the project, highlighting their expertise, their discipline and what they will contribute to the project (maximum 100 words per person).
3	CVs of the main applicants	Please upload CVs of all collaborators participating in the project.

The format and content of the CVs is left to your discretion but should include a list of publications. You do not need to include contact details as these are included earlier in the application. **Each CV must not exceed three pages and should be submitted as one document in PDF format.**

Questions:

2. Project details

Here you will provide the main summary details for the application, the costs, and an abstract of the proposed activities.

	Question	Information
1	Project title	The essence of the research should be captured in the title and should be as informative as possible. Please use no more than 10 words and ensure that it is understandable to a non-specialist reader.
2	Abstract	The project summary should provide an overview of the interdisciplinary engineering challenge you are addressing, a brief overview of your aims, the programme of activities and the benefits of the research to be undertaken during the collaboration. The summary should be written in language that can be understood by a non-specialist reader (maximum 300 words).
3	Total project cost	The value requested should be between £10,000 and £20,000.
4	Start and end date	Please enter the start and end date of the proposed collaboration. The award must start on or before 9 March 2020 and end on or before 9 March 2021 .
5	Is this a new collaboration?	Please confirm that this is a new collaboration, as pre-existing collaborations are not eligible.

Please note that a final report, including a financial statement, must be submitted on or before 10 April 2021, so please ensure you leave time to complete this at the end of your project.

Questions:

3. Challenge details

	Question	Information
1	Challenge area	Please select a maximum of three global challenge areas that your project will address from the list below. If you feel that it addresses more than three, please select the three that you feel are most relevant. Please note that selecting more than one area will not necessarily strengthen your application – a lack of clarity on what you are trying to achieve may count against you. We recommend you only select one or two challenge areas.
2	Please select the DAC list country that your project will primarily focus on	You can see the list at: http://bit.ly/DACLIST
3	Please list any other DAC list countries that your project will focus on	This should take the form of a list, not an explanation. While a successful project may have the potential to be rolled out in other countries, we recommend that you are as specific as possible as to which countries this early phase of the project will directly benefit. Remember, being specific will count in your favour (maximum 10 words).
4	Official Development Assistance (ODA)	Please explain how the collaborative project will address the challenge identified in the country or countries listed. You should focus on a specific challenge that will enhance social welfare and economic development in developing countries (maximum 400 words).

For more guidance on ODA, please refer to Global Challenges Research Fund guidance available via: www.ukri.org/research/global-challenges-research-fund

Questions:

4. Goals, objectives and outcomes

	Question	Information
1	Goals and objectives	Please list the main objectives the project will achieve and explain how they benefit from an interdisciplinary approach. In our experience, the most successful projects have specific and realistic objectives that are time sensitive (maximum 400 words).
2	The main activities to be undertaken	Describe the programme of activities and milestones that will be used to measure progress. You should include how you will measure success, and make sure you have built in enough time to your proposal to carry out the activities. We would recommend including a timeline in your answer (maximum 800 words).
3	Pictures and diagrams (optional)	Upload any pictures and/or diagrams related to your project in a single pdf document .
4	The expected outcomes and impacts of the project	Please list the expected outcomes of the project and identify who will benefit from it, as well as any other impacts it will have (maximum 400 words).
5	Justification of costs	Please provide a breakdown of the funding requested using the table in the application form. The amount requested must be an accurate and reasonable reflection of what you expect to spend on each category. Allowable costs and funding guidelines are as follows (next page):

Although payments will be made to the UK institution, it is up to the collaborating partners to decide how to distribute funds in the most effective way to enable the project to take place.

Cost and funding guidelines:

- There is no set limit on how much you can claim between the directly incurred cost headings, for example travel and subsistence, consumables, other costs. 'Consumables' include project-specific costs of small equipment, computer software licenses or publication costs. Examples of 'other costs' are conferences and seminar fees.
- Please note that the funding provided by this scheme is **not** calculated on the basis of full economic costs.
- The totals may come to more than the maximum funding you can request under this scheme. Additional costs must be met by the participating institutions. If the amount noted is higher than the award can provide, please state the contribution to be made by each institution.
- Exchanges do not need to be continuous and applicants may incorporate breaks between the visits. Any such breaks between visits do not count towards the length of the visits, and so should be ignored when calculating the funding requested.

At the end of the project, any excess funding awarded will be repayable to the Academy.

The funding provided is not a salary for the researchers or PhD salaries, but a grant to cover the travel, accommodation, living expenses and visas of any researchers, PhD, masters or undergraduate students, participating in the research.

- Small stipends for undergraduate and masters students, as well as service provision directly required for the project (such as translation or IT services) are eligible but should account for no more than 5% of the total grant. Should your proposed costs fall outside of these parameters, please contact RAEng to discuss as they may be eligible on a case-by-case basis if well-justified.
- The host institution(s) can include up to 10% of the grant as a contribution to project management, administrative and other running costs.
- Subsistence costs should reflect the normal rates applied at the host institution/s. All other costs should be based on the best value option available.
- Any individual piece of equipment must have a value of less than £10,000.

When completing this section, please provide a narrative description of what resources are being requested and why. It should include:

- all necessary justification for costs and the duration of the travel
- travel, consumables, equipment, visa fees, hosting events, etc.

Questions:

5. Support and declarations

UK institution/university declaration

The purpose of the declaration is to confirm that the application is acceptable in principle to the UK research institution/university, and that it has received all necessary internal authorisations.

The declaration terms must be printed on headed paper and be signed by an appropriate officer from the Research Grants Office or equivalent (i.e. the body which administers grant applications) of the lead applicant's institution/university. A scanned copy of the letter should be uploaded by the applicant. We do not require a hard copy.

A summary of the terms that the declaration must contain is shown below – it is important that the **exact phrasing is used**. Please **copy this table directly** into the declaration:

The applicant will be employed by the institution/university for the duration of the award.	
The applicant and any co-applicant(s) will be given full access to the facilities, equipment, personnel and funding as required by the application.	
The costs submitted in the application are correct and sufficient to complete the award as envisaged. Any shortfall in funding will be met by the institution/university.	

Assessment

Assessment of applications

Applicants will be evaluated by a specially-convened panel of Academy Fellows with expertise spanning the breadth of engineering. Each application will be assessed by a minimum of two panel members, one of which will have technical expertise of the application, and the other will be a general reviewer. Reviews are followed by a Sift Panel, where the final decision is made. You will be informed of the outcome of your application by **early February 2020**.

All applications will be assessed against the following criteria:

ODA compliance

How well does the research project support the aims of the [GCRF Fund](#) in terms of meeting ODA objectives:

- Is the aim to promote the welfare and economic development of a country or countries on the [DAC list](#) of ODA recipients?
- Is it designed to address a development need, and
- Is the focus on a particular challenge faced by a developing country?

Quality of project

- Quality of the proposed project including: vision, goals, and interdisciplinary approach, pathway to impact, and dissemination.
- Quality of the applicants' relevant experience, the proposed collaborative activities between the applicants and how they complement each other, and any other collaborators involved

Outcomes and impact

- Potential benefits and impact of the project
- Potential impact on development challenge identified, and/or on economic growth and social development in developing countries.

Suitable and Realistic budget

- Has the applicant included a suitable and realistic budget, including a breakdown of the costs involved in the project?