Royal Academy
of Engineering

**Royal Academy of Engineering
Industrial Fellowships: Academia to Industry – 2024/25**

**Applicant guidance notes
Deadline: 29 February 2024, 4 pm GMT**

The scheme opens for applications once a year, open early December – late February. The scheme is funded by the **Department for Science, Innovation and Technology (DSIT).**

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1. Introduction

Strategic industry–academia research collaborations provide significant benefits to their participants. Industry can improve business performance through developing new techniques or technologies, de-risk investment in research, and extend the capabilities and expertise available to the business. For academics, these benefits can include the opportunity to address challenging research questions with real-world applications, see their research have tangible impacts, and gain access to new skills, data, or equipment.[1] Investment in collaborative R&D also delivers real benefits to the UK, driving growth and productivity improvements for businesses and high-quality research outputs.

The Royal Academy of Engineering (Academy) Industrial Fellowships (IF): academia to industry scheme enables mid-career academics to undertake a collaborative research project in an industrial environment. The scheme aims to strengthen the strategic relationship between industry and academia by providing an opportunity to establish or enhance collaborative research between the two parties. Post-placement, academics will use their industrial experience and knowledge of current industry practices to enhance both their teaching and student learning.

The scheme provides funding for up to two years. Each application is capped at a maximum contribution from the Academy of £50,000 per year. The award must be held at a UK higher education institution.

In addition to the direct financial support, the scheme benefits include:

- Mentoring support from an Academy Fellow to offer independent expert advice and guidance on research related matters throughout the duration of the award.

- Training, events, and additional funding opportunities.

- Reduction of teaching and administrative duties to enable the awardees to focus on delivering everyday application or solution for society to increase research impact.

- Networking opportunities with other awardees and Academy Fellows.

- Member of the Awardee Excellence Community.

Each year, the IF application window is early December through to the end of February.

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[1] *The Dowling Review of Business–University Research Collaborations*, July 2015

2. Diversity and inclusion

The Academy is committed to diversity and inclusion and welcomes applications from all underrepresented 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.

The Academy wants to support applicants to achieve a balance between their personal and work demands and will consider individual requirements and part-time and other flexible working arrangements.

The request for a part-time award (at no less than 25% of full-time equivalent) must be clearly stated within the application. Alternatively, academic industrial fellows can be converted from full time to part time, or from part time to full time, during the award, assuming the host institution supports the request.

Academic industrial fellows are entitled to maternity, paternity and adoption leave under the host institution's normal conditions of employment. The Academy will extend the duration of the award pro-rata to take into account such periods of leave and any conversions to part-time working. Industrial Fellowships with caring responsibilities should liaise directly with their university if they wish to apply for part-time or flexible working.

3. Access mentoring

The Academy aims to provide additional support to applicants from groups that are persistently underrepresented within UK engineering through the grant application process. This [positive action](#) will contribute to improving diversity in the talent pipeline and widening the diversity of applicants and awardees within the Academy's research grant schemes.

To be eligible for Access Mentoring support for IF applications, applicants must be either:

- Women

- Black people, including those with any mixed ethnicity with Black ethnic background(s)

- Disabled people

The Academy accepts applicants' self-declaration on the above identified underrepresented groups under their host institution's guidance.

Access Mentoring is a resource limited opportunity. Applicants do not need to wait. until the deadline to submit their application and can be matched with a

mentor as soon as the application is approved. Early submission is encouraged. For more information on Access Mentoring please see the https://raeng.org.uk/access-mentoring.

4. Eligibility criteria

Applications are welcome from any engineering discipline, see Annex 1. Engineering is defined in its broadest sense, encompassing a wide range of diverse fields. If you are unsure whether your collaborative research project falls within the Academy's engineering remit area, please contact the research team (research@raeng.org.uk).

4.1 Specific criteria:

4.1.1 Applicants should hold an academic teaching or research contract at a UK university that outlasts the duration of the fellowship.
4.1.2 Applicants should be mid-career to established academics (lecturer, reader or equivalent).
4.1.3 Applicants should be teaching engineering at undergraduate or postgraduate level at a UK higher education institution/university at the time of the application deadline.
4.1.4 Applicants must have a minimum of two years teaching experience as a permanent academic or relevant experience at the time of the application deadline.
4.1.5 The industrial host should have a significant presence in the UK.
4.1.6 Collaborations with a 'government funded industrial organisation' are eligible to apply. Please contact the research team if you have any questions. We welcome applications from public organisations or research organisations.
4.1.7 Industrial host must comply with the guidelines of the "industrial contribution conditions and requirements", see section eight.

This scheme will only fund collaborative engineering research projects between industry and academia. Research projects must include "industrial research" with a focus on "research and development" and "innovation".

*"**Industrial research**" means the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services.*

*"**Research and development**" means activities which must be novel, creative, uncertain in outcomes, systematic and transferable and/or reproducible. All five criteria are to be met every time a research and development activity is undertaken whether on a continuous or occasional basis.*

*"**Innovation**" means a new or improved product or process (or combination thereof) that differs from the previous products or processes and that has not been made available to potential users (product) or brought into use (process).*

*"**non-economic scientific research**" means a commercial organisation does not receive a specific benefit from the financial assistance given to the research organisation.*

Definitions provided from the 'Research, development and innovation streamlined subsidy scheme' document pursuant to section 10 (5) of the 'Subsidy Control Act 2022'. For further subsidy information please refer to Annex 2.

Individuals looking for funding to spin out or start-up a company should apply to the [Academy's Enterprise Fellowship scheme](). There are no specific technology readiness level (TRL) requirements for the IF.

There are no nationality and age restrictions for applicants.

Applicants with both new and existing partnerships are eligible to apply. Individuals looking to collaborate with small and medium-sized (SME) industrial organisations are particularly welcome to apply. University spin-out companies are eligible to host applicants.

Applicants who have previously held an IF and would like to continue this collaboration with a new project are also welcome to apply. Academy awardees may also apply but current awards should be closed, and final reports submitted prior to the IF award start date.

It is the applicant's responsibility to contact the industrial host organisation to gain their formal approval before applying.

Any applications do not fulfil eligibility criteria will be rejected.

5. Submission deadline

The submission deadline for this round of applications is **16:00 GMT on 29 February 2024.** Incomplete applications will not be accepted.

6. Duration

Fellowships can be held from six months to two years full time or part time. The minimum award is 25% of your average working time over the period of the award but this does not have to be the same working pattern every week.

For awards lasting over six months, awardees can request for a 1-year no cost extension to their fellowship. No additional funds will be provided by the Academy. These extension requests will be considered on a case-by-case basis and are subject to the discretion of the Steering Group.

7. Funding

The scheme provides funding to cover the applicant's basic salary costs. This should be pro-rated against the amount of time to be spent on the fellowship.

The Academy will contribute up to a maximum of £50,000 (per annum) towards the basic salary costs (excluding overheads) of the applicant (including National Insurance and superannuation). **The total award is capped at £100,000, for awards that exceed one year in duration.**

Due to **subsidy control limitations** the maximum you can apply for is based on the size of the industrial organisation collaborating on your project.

8. Contribution conditions and requirements

It is expected that industrial organisations demonstrate their commitment via an auditable in-kind contribution and/or an appropriate cash contribution to cover additional expenses. It is expected that this industrial contribution be made proportionate to the size of the industrial company, see table one.

Table one: Industrial contribution minimum requirements table

Company size*	Must meet two or more of these requirements	Expected industrial host contribution (auditable in-kind and/or cash)
Small	Turnover: No more than £10.2 M Balance Sheet total: No more than £5.1 M Number of employees: 10-49**	15%
Medium	Turnover: No more than £ 18M Balance Sheet total: No more than £ 18M Number of employees: 50-249	25%
Large	If it exceeds the medium size limits	35%

The size definitions defined by "Research, Development and Innovation Streamlined Route" which references the Companies Act 2006 section 382 and 465.
*** If two requirements are not met and <10 employees you should contact the Programme Manager for assistance with your application.*

Table two details an example of an industrial host contribution.

Table two: Example costings two-year full-time fellowship at £50,000 per annum

Company size	Expected industrial host contribution
Small	£8,823.53 per annum
Medium	£16,666.67 per annum
Large	£26,923.07 per annum

8.1 Industrial contribution requirements

To comply with the 'Subsidy Control Act 2022' all industrial partners are requested to contribute cash or in-kind as per table one.

8.2 Use of industrial contribution

Industrial contributions should be used flexibly in support of the IF. This may include both cash and in-kind contributions (for example, access to facilities, technical staff equipment, and consumables). For auditing purposes all in-kind support should be fully costed.

8.3 Publication of results

Results that do not give rise to intellectual property rights may be widely disseminated and where any intellectual property rights arising from the project are allocated to the organisations involved in a manner which reflects their contributions (i.e. intellectual property rights resulting from the activities of the research organisation are fully allocated to it).

8.4 Academia contribution expectations and uses

It is anticipated that universities will likely incur contributions in order to participate in this kind of fellowship. This can be considered an 'academia contribution'. These costs may arise in the form of access to facilities, technical staff, equipment, and consumables. For auditing purposes, all in-kind support should be fully costed.

Reviewers and panel members will be advised to take into consideration the unequal impacts that COVID-19 related disruptions might have had on companies and universities.

Note: At the end of the fellowship, it is expected that the relevant university head of department confirm (in writing) that the Academy's financial contribution was used to release the Industrial Fellow from other

duties (admin, teaching and supervision etc.), which enabled them to fully concentrate on the research relationship.

9. Mentoring and monitoring

9.1 Role of the mentor

For fellowships over 12 months, the awardee be assigned an Academy Fellow to be their mentor. The mentor will provide independent expert advice and guidance on research-related matters throughout the duration of the fellowship. The mentor will also formally monitor the progress of the awardee on behalf of the Academy.

By mutual agreement and at the full discretion of the Steering Group, mentors can be assigned to awardees with fellowships that have a duration of less than 12 months.

9.2 Monitoring requirements and expectations

All awardees (regardless of fellowship duration) will be required to provide a report to the Academy at the end of their fellowship, describing completed activities and future plans. The final report should follow the reporting guidelines, to detail progress made against the proposed work plan. Awardees will also provide a follow-up report 12 months after the completion of the award, to demonstrate the longer-term impact of the IF.

For fellowships over 12 months, the awardee must submit an annual progress report to the Academy, which will be reviewed and evaluated by their assigned mentor. Annual reports should follow the reporting guidelines in table three.

Table three: Summary of required reports

Report	Notes
Annual progress report	Only applicable for fellowships >12 months
End of fellowship Report	To be submitted at the end of the fellowship
Follow-up report	To be submitted 12 months after the fellowship has finished

10. How to apply

All applications must be submitted via the Academy's online grants management system (GMS): https://grants.raeng.org.uk. The applicant must first register with the system and provide some basic log-in details to create a profile.

Before completing the application form, applicants are asked to complete a **Diversity Monitoring Form** to help the Academy monitor and assess its equality, diversity and inclusion policy. The information will be treated as strictly confidential, non-attributable and only reported when collated. It is gathered, stored and used in compliance with the **Academy's Privacy Notice** in line with the General Data Protection Regulations 2018. The information will only be used for statistical purposes with access restricted to staff involved in processing and monitoring the data. It will not be seen by anyone involved in any selection processes. No information will be published or used in any way that identifies individuals. The Academy will retain personal information as per our **Data Retention Policy**.

The application form has six sections and should take approximately three hours to complete. We recommend you keep this document to hand when completing the application form.

Many of the questions have prescribed word limits, which are designed to keep your answers focused and to give you an indication of the level of detail we require. In such cases, the number of words you have used will be displayed beneath the question and updated in real time.

Applicants can download a PDF of their application after submission, which is recommended for reference. Assessment of the application will consist of a one-stage process and those meeting the eligibility criteria will enter the assessment stage.

11. Completing the application form

After registering and logging into the GMS, select the 'RAENG Portal' tab on the top left of your screen. Here you will be presented with a list of all Academy schemes that are currently accepting applications.

Find the **Industrial Fellowships: Academia to Industry Application** and click on 'Start Application'. You should be presented with the 'Instructions' screen, where you will see some general instructions on how to use the system, and links to **six pages** of the application form.

1. Applicant and institution details
2. Project details
3. Subsidy Control Compliance
4. Case for support

5. Letters of support and declaration
6. Marketing

You can answer in any order and save your work at any stage in the application process to return to it later.

You should also ensure that you have all the necessary documentation to complete the application, such as a copy of your CV and two letters of support.

Page 1: Applicant, institution and industrial host details

Please provide the applicant's name, current job title and contact details including postal address and a telephone number. Please ensure the contact email address will be valid for the entirety of the application process as this will be our main method of communication.

Q – Please upload your CV

The CV must be uploaded in a single PDF no longer than 3 pages.

Include details of any industrial experience that is relevant to the research project. As a minimum, please include the following in your CV:

- Your qualifications (listed in reverse order)
- Any patents relevant to your application
- Your track record in research or experience in research and development
- Any involvement with relevant professional institutions
- List of key publications (with links if available)
- Conference presentations
- Current and previous teaching duties
- Awards/prizes received (if any)
- Details of any successful or pending grant applications
- Student supervision or training responsibilities

Please do not include personal information (e.g., gender, date of birth, and nationality) in your CV.

Q - Candidate's most significant achievements

Please describe three to five of your most significant achievements in your research career. We would like to emphasise that all achievements and outputs are welcome and considered valuable to the Academy, not just peer-reviewed publications. Outputs also include, and are not limited to code, patents, spin-out companies, events, public engagement, and policy impact. Please briefly explain the significance of the achievement in a way that will explain it to a researcher from your discipline who may not be familiar with latest work in the field.

You have up to 500 words to answer this question.

The Academy's research programmes are aligned with the principles of the Declaration on Research Assessment (DORA). If research articles published in peer-reviewed journals are to be included in an application, we would therefore like to emphasise that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

Q - Impact of COVID-19 (optional)

The Academy understands that the impact of the coronavirus pandemic on researchers and their work will be varied. Please provide a summary of how the pandemic has affected your research activities.

This can include but is not limited to the following: pause on experiments/research plans, reduced ability to work due to additional caring responsibilities, delays in publishing/submitting a key paper(s) please note pre-prints can be included in your publications list).

You have 500 words to answer this question.

Q – Industrial host organisation details

Please complete the table with details of the industrial host organisation and their core business activities.

Please provide the contact details of a named employee who will also be associated with this project.

Q – Industrial host organisation size

Please indicate the size of the industrial host organisation that you will be collaborating with by selecting one of the options presented. Please refer to Section eight, table one.

Page 2: Project details

Q - Project start date

Please enter your proposed start date: 2 September – 31 October 2024.

Q - Project end date

Please enter the expected end date: 3 March 2025 – 30 October 2026.

Q – Type of award – full time or part time

Pick from the drop-down menu the average percentage of working time you anticipate dedicating to the project: 25-100%.

Q – Work pattern during the fellowship

Provide details of the format of the fellowship including: anticipated full-time or part-time working pattern, any travel and accommodation arrangements, and how you propose to balance your university and industry commitments.

You have up to 250 words to answer this question.

Q – Funding Requested

The salary contribution is calculated as the basic salary (excluding overheads) of the applicant (including National Insurance and superannuation) paid pro-rata against the time to be spent on the IF at the host organisation. You must enter the full amount which covers the entire duration of your fellowship. Please consider incremental annual increases in your calculation.

You must do this calculation, with consultation from your grant office. Amendments cannot be accepted Post-award.

Each application is capped at a maximum contribution from the Academy of £50,000 per annum (excluding overheads). Applications that exceed one year in duration will be capped at £100,000 for the whole duration. It is expected that the university will use the Academy contributions to support the award, for example by paying for replacement staff.

The time spent on the fellowship should not be attributed to the time allocated to research but should instead come out of the time dedicated to the awardee's usual day to day duties (which may include, but is not limited to, consultancy, core business, teaching, supervision and admin duties). The applicant's research activities should not be negatively impacted by the fellowship and should be considered an addition to their normal research, rather than instead of.

Q - Industrial cash and in-kind contribution requirements

Complete the costing table outlining industrial cash and in-kind contributions, see table three.

Table three: Cash and in-kind contributions costing table:

	Year 1 (£)	Year 2 (£)	Total (£)
Cash contribution			
In-kind support			
Total			

Q - Academic cash and in-kind contributions costing table

Complete the costing table outlining academic cash and in-kind contributions.

Q - Project title

The project title should not be longer than 10 words and should be understandable to a non-specialist reader.

Please note that the position will be known as the Industrial Fellowship: Academia to Industry in [project title]. A more succinct and approachable title will be beneficial for media/outreach activities.

Q – Abstract

Describe the research in terms that can be understood by a non-specialist reader. The essence of the project should be captured in this section and should be as informative as possible. Guidance on plain language via NIHR.

You have 150 words for this section.

Q - Subject category

Select one single broad engineering category that best describes your research area. See Annex 1 for the list. The category selected will be used to identify reviewers and panel members for the assessment process. If your research fits into several categories, please pick the category that is most applicable to your proposal.

Q – Please provide keywords relating to the project

List 10 keywords to help us identify suitable reviewers for the assessment process.

Page 3: Subsidy Control Compliance

To ensure that the Academy is compliant with the 'Subsidy Control Act 2022', the next couple of questions follow as standard within our research programme calls to ensure that the Academy appropriately determines whether the grant is a subsidy. For more information read Annex 2.

Q - Please confirm whether your research project is either:

a. A piece of non-economic scientific research (with or without commercial collaborators) in terms of the Statutory Guidance on Subsidy Control clause 15.33 "Non-economic scientific research may be carried out in collaboration with commercial organisations, as long as the commercial organisation does not receive a specific benefit from the financial assistance given to the research organisation. This would be the case, for example, where the commercial organisation pays the full cost of the project; or where results that do not give rise to intellectual property

rights may be widely disseminated and where any intellectual property rights arising from the project are allocated to the organisations involved in a manner which reflects their contributions (i.e. intellectual property rights resulting from the activities of the research organisation are fully allocated to it). The commercial organisation is also unlikely to benefit if the research organisation receives compensation equivalent to the market price for the intellectual property rights which result from their activities."

b. An Industrial Research project with identified commercial collaborator(s) ("Industrial Research means the planned research or critical investigation that is aimed at the acquisition of new knowledge and skills for developing new products, processes or services; or that is aimed at bringing about a significant improvement in existing products, processes or services") For more details, see RD&I Streamlined route guidance 14.3.

Q – How many commercial organisations are you collaborating with on this project?
Please enter an integer between 1-100, including the industry host in this application.

Q – Can you confirm that when working with that/those commercial organisation(s) that results that do not give rise to intellectual property rights will be available to be widely disseminated and that any intellectual property rights arising from the activities of the research organisation fully allocated to it?

If yes, this statement should also be confirmed by the University and industry supporting letters.

If no, the Academy will need to review the particulars of the benefits to the commercial organisation. Further investigations will need to be carried out to ensure that we comply with funder regulations as per section 14 of the Research, development and innovation streamlined route guidance pertaining to the 'Subsidy Control Act 2022'.

Q – Intellectual property rights
State the intellectual property rights arrangement agreed between the industrial organisation and academic partner.

Please note that as per section eight we expect that all projects should aim to produce some substantial publishable research results that are available in the public domain. Publication may be delayed until intellectual property has been suitably protected.

You have up to 200 words to answer this question.

Page 4: Case for support

In this section, please indicate the main activities to be undertaken and the expected outcomes, including how you intend to maximise the benefits gained from the IF.

Q – Provide a detailed description of the collaborative research to be undertaken

Describe the programme of work to be undertaken during the award including how novel, realistic/ambitious the research project is. Outline the specific deliverables anticipated and appropriate milestones by which to measure progress.

You have up to 1,000 words to answer this question.

Q – Images and diagrams

Upload any images and/or diagrams related to your project that add value to your application. Any images/diagrams uploaded must be referenced in the application form. The **images/diagrams must be collated and uploaded as a single PDF** in the order you wish them to be viewed.

Q - How will the results be exploited, both in general terms and more specifically by the industrial organisation participating in this fellowship?

In the previous question, you explained what the benefits of the research are. Here you should explain how the benefits and impacts mentioned above will be achieved.

"*Exploit*" means realising and making use of economic or social benefits from research, development and innovation activities, and includes commercialisation. Definition provided from the 'Research, development and innovation streamlined subsidy scheme' document pursuant to section 10 (5) of the 'Subsidy Control Act 2022'.

Identify what mechanisms are in place for identification, protection and subsequent exploitation of any deliverable that may arise from the research (including details of any specific collaborative agreement, where relevant). You should also indicate when these routes to exploitation are likely to be implemented, including your plans beyond the period of the award.

You have up to 250 words to answer this question.

Q - Choice of the host industrial organisation
Provide justification for the choice of your industry partner including the strategic importance of this relationship to you and your institution/organisation. Also, please include a few comments on the track record of the industrial organisation in commercialising new technology and

on any previous relevant collaborations that the industrial organisation has had with universities and other partners.

Outline what would be the expected benefits for the industrial company through this appointment. Provide details of what has been achieved so far through any existing collaboration and what is the overall perceived long-term vision for this relationship. This could include how establishing or strengthening links between the industrial and academic sectors (and the wider group of stakeholders) will benefit you at this stage of your career and how the award will lay the foundation for a future long-term collaboration.

You have up to 350 words to answer this question.

<u>Q – Further information on your UK higher education institution/university</u>

Provide justification for the choice of your UK higher education institution/organisation including the strategic importance of this relationship to you. Also, please include a few comments on the track record of the academic organisation in commercialising new technology and on any previous relevant collaborations that they have had with other partners.

Outline what would be the expected benefits for the university through this appointment. Provide details of what has been achieved so far through any existing collaboration and what is the overall perceived long-term vision for this relationship. This could include how establishing or strengthening links between the industrial and academic sectors (and the wider group of stakeholders) will benefit you at this stage of your career and how the award will lay the foundation for a future long-term collaboration.

You have up to 350 words to answer this question.

<u>Q – Enhancement of teaching/student learning and knowledge exchange</u>

Outline your plans to use your industrial experience to enhance both your teaching and student learning upon your return from the IF.

You should include details of how you propose to enrich your teaching activities (such as undergraduate/postgraduate teaching curriculum development, supervision of project students). Please outline the envisaged impact upon student learning and how it will enhance the employability of your students.

You have up to 500 words to answer this question.

<u>Q - Current teaching activities</u>

Please detail your current teaching load or work commitments, including, but not limited to, undergraduate/postgraduate courses, number of contact hours, number of students, supervision of project students, supervision, consultancy and core business duties and so on.

You have up to 250 words to answer this question.

Q - Diversity and inclusion

The Academy strives to create cultures in which everyone can thrive, and we believe that diverse perspectives enrich our collective performance. What does diversity and inclusion mean to you, and what are you and your team doing to address it? Consider your team, collaborators and universities, the implications on your research design and topic and the overall contribution this will have on your success.

You have up to 250 words to answer this question.

Q – Mentor suggestions

If your project is >12 months, we will arrange for one Academy Fellow to be your mentor during your fellowship. To facilitate this process please suggest 3 Academy Fellows (FREng), who you are interested in having as your mentor. Please list their details in order of your preference.

If you are awarded a fellowship, we will contact them to get their agreement. Please do not suggest Fellows from your university and ensure that they have the areas of expertise to offer advice on your research project and career development. You can search Fellows by name or expertise here.

Alternatively, you seek advice on mentor selection by talking to an Academy Fellow at your university.

Page 5: Letters of support and declarations

This section seeks confirmation for the support that both the university and the host industrial organisation will provide and that they have considered the strategic importance of the collaboration. Please ensure you request these support letters well in advance.

Q – Letter of support from the University head of department/school

This letter of support must come from your head of department/school.

Please upload a signed letter of support from the head of department/school confirming their commitment to this application and the proposed fellowship.

At a minimum the letter of support should contain the following:
- How this proposed industrial collaboration aligns with the strategic priorities of the department or the university.
- How the proposed IF will strengthen the strategic relationship between both parties (university and industry).
- Outline how this collaborative research partnership will be sustainable beyond the period of this proposed fellowship.
- Confirmation regarding the applicant's teaching load and details of how the applicant's duties will be covered during the period of the

fellowship.

- How any salary savings will be used to support this award, for example by paying for a teaching or work replacement and or contributing to travel and accommodation costs.
- Details of any cash contributions or in-kind support provided by your university institution.
- Declaration of results that do not give rise to intellectual property rights are available to be widely disseminated and any intellectual property rights arising from the activities of the research organisation are fully allocated.

The letter should not exceed two pages and should be submitted as a PDF.

Impact of COVID-19 on the business?

University hosts can use this letter of support to highlight details of the impacts of coronavirus pandemic on their business and how this may potentially affect their support for the fellowship.

Please note that reviewers and panel members will be advised to take into consideration the unequal impacts that COVID-19 related disruptions might have had on companies and universities.

Q – Letter of support from the industrial host organisation

Please upload a signed letter of support from the industrial host organisation, confirming their commitment to this applicant and the proposed fellowship.

The letter should be on headed paper, signed by the author and uploaded by the applicant as a PDF. It should not exceed two pages.

At a minimum the letter of support should contain the following:

- Confirmation of the host's commitment to this fellowship, which explains why this collaboration is strategically important to them and what the anticipated benefits will be.
- A brief description of the planned work and how it fits within the industrial company's aims and activities.
- Detail of what facilities, training and equipment will be made available to the Industrial Fellow, and any other contributions they will make to the award.
- Full cash costs and in-kind costs of the Industrial Fellowship to the host, in terms of facilities, equipment, staff time and so on.
- Declaration of results that do not give rise to intellectual property rights are available to be widely disseminated and any intellectual property rights arising from the activities of the research organisation are fully allocated.
- Impact of COVID-19 on the industrial sponsor's support (if necessary).

The industrial sponsor can use this letter of support to provide details of the impacts of coronavirus pandemic on the business and how this may potentially affect their support for the fellowship. Reviewers and panel members will be advised to take into consideration the impacts that COVID-19 related disruptions might have had on the industry's support for the award.

<u>Q – University declaration</u>

This declaration must come from your university.

The university declaration letter must be completed by an appropriate individual from the university's research support office or equivalent. The letter must be on headed paper and should carry the signatory's name, position, contact details, and the institution's official stamp (if available). The letter must confirm their support for this application and the proposed fellowship.

The letter must confirm that the application has been approved by the university or industrial organisation and **must contain the wording given in the box below**. The declaration should be uploaded by the applicant as part of their submission. The application will not be sent to the Central Research Office for formal approval, and this letter is confirmation that the applicant has obtained all the necessary permissions to submit.

On behalf of the university I can confirm that I have read and accept the application guidance and other information regarding this award scheme that is provided on the website of the Royal Academy of Engineering. I also confirm that:

- The costs submitted in the application are correct and sufficient to complete the award as envisaged.

- Any shortfall in funding discovered after the award has been made will be covered by the institution, potentially through other grants.

- If awarded, the applicant will be given full access to the facilities, equipment, personnel and funding as required by the application.

- The applicant will be employed by their university for the duration of the award.

- Results that do not give rise to intellectual property rights are available to be widely disseminated and any intellectual property rights arising from the activities of the research organisation will be fully allocated.

- The applicant will be allowed to go on the Industrial Fellowship as detailed in the application, and all necessary contractual arrangements will be made with the industrial host organisation.

- I am authorised to approve the submission of applications for funding and this application has successfully met all our internal approval procedures.

- The university will have an appropriate bilateral agreement or equivalent in place with the industrial host organisation by the proposed start date as started in the application and agrees to share this with the Academy.

Q – Applicant declaration

Once you have read and understood the declaration included in the application form, please complete your details and tick the check box. A grey 'submit application' button will become available once the application form is completed.

Please note that once submitted the application cannot be edited and updated, but you may view it from your GMS account.

Page 6: Marketing

Please answer this section so that we can correctly market our research schemes.

12. Assessment of applications

This scheme has a one stage assessment process:

1. Peer review

2. Selection panel

Applications will be reviewed, scored and ranked by a selection panel comprising of Academy Fellows and experts as deemed necessary. They will consider several factors.

Academia to industry fellowship application are reviewed on the following factors:

1. Research track record of the candidate.
2. Quality of the proposed collaborative research project.
3. The potential for impact with continuous professional development and on future employability.
4. The strategic benefits and sustainability.
5. Exploitation of results.

Full reviewer guidance notes are available upon request. Please contact research@raeng.org.uk

Applicants will be notified of the outcome of their application in June 2024. All awards are expected to start their fellowship **1 September - 31 October 2024.**

13. Contracts

13.1 University and Academy contract

For successful applications, a bilateral contract must be drawn up between the university (participating in the scheme) and the Academy.

Our standard contract template is available here for reference. All award funds will be paid to the university participating in the scheme (without exception).

13.2 University and industrial host organisation contract

An appropriate bilateral agreement between the university and the industrial host organisation is also required and needs to be signed before Academy and university contract can be finalised. Both contracts need to be completed before 1 December 2024.

13.3 Bilateral agreement contract templates

As every collaboration is unique, the Academy does not provide specific contract templates for bilateral agreements between the university and the industrial host organisation. It is ultimately the responsibility of the named

awardee in the application to ensure that contracts are executed to the expected requirements and deadlines. Failure to do so may result in the award being withdrawn.

If successful, applicants are asked to approach the university research and grants office as soon as possible to begin to process of, signing the Academy and university contract and drawing up a bilateral agreement with the industrial host organisation.

Although the Academy does not provide specific templates for industrial and university bilateral agreements, awardees can direct the university research and grants office to the government's '[University and business collaboration agreements: Lambert Toolkit](#)' for reference. There are several bilateral agreement templates available there.

14. Publications and policies

14.1 Concordat

The Academy is a signatory to The Concordat to Support the Career Development of Researchers and The Concordat for Engaging the Public with Research.

14.2 Open access

The Academy encourages awardees to use open access routes for their peer-reviewed publications, choosing the best route to maximise the social and economic impact of their work. For more information on our open access policies and other Academy policies please visit our website: https://raeng.org.uk/programmes-and-prizes/programmes/uk-grants-and-prizes/support-for-research/programme-policy-documents

14.3 Declaration on Research Assessment (DORA)

The Academy's research programmes are aligned with [DORA](#), which is a set of principles aiming to improve the ways in which the output of research is evaluated by funding agencies, academic institutions, and other parties. The outputs from research are many and varied, and as a funder of engineering research the Academy needs to assess the quality and impact of these outputs to make awards. It is imperative that research output is measured accurately and evaluated wisely.

In the assessment of research output, we would like to emphasise that all outputs are welcome and considered valuable to the Academy. Outputs can include open data sets, software, publications, commercial, entrepreneurial, or industrial products, clinical practice developments, educational products, policy publications, evidence synthesis pieces, and conference publications. Regarding research articles published in peer-reviewed journals, the scientific

content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

We value and appreciate the time and effort that reviewers give to support our research programmes. A good, helpful review for the Academy is one that assesses research on its own merits rather than by surrogate measures, such as based on the journal in which research is published.

14.4   Guidelines on the use of generative AI in the grant application process

14.4.1   Exclusion of AI in Evaluation: Assessors must refrain from using generative AI tools to make judgments or write feedback on grant applications. The Academy's approach relies on the expertise of its Fellows (or other assessors identified by Fellows or Academy staff) in evaluating applications and passing on their knowledge to the next generation. Any reliance on machine intelligence is not in line with our established working methods.

14.4.2 Confidentiality of Application Content: Assessors are explicitly prohibited from sharing the content of grant applications with any generative AI tool as this can lead to the submitted data being used for other purposes. Maintaining the confidentiality of the application materials ensures the integrity of the assessment process and upholds the trust placed in the Academy's evaluation procedures.

14.4.3 Detection of improper use of AI: At present the Academy has no formal tools for identifying whether AI has been used in generating content (although it may seek to acquire such tools in future, subject to strict data security requirements), and therefore is primarily relying on honesty and integrity from applicants. However, the use of current

14.4.4 Tools can generally be identified through close reading, particularly if the applicant has also been interviewed. Exceptionally, assessors may request a short interview with applicants that they would otherwise not have interviewed prior to confirming funding, to build confidence that there has not been improper use of AI tools.

14.5 National Security

The Academy is the UK's National Academy for engineering and technology and seeks to increase the potential positive benefit that innovations can have for society, whilst reducing the risks of harm. Hence, in all our activities, we seek to minimise the risk that technology developed as part of work that we support could be misused by a foreign state to build a capacity to target UK interests in a hostile fashion or to control or repress their population. There is a risk that for some grant activities, failure to protect IP and a lack of due diligence into collaborators could result in sensitive technology being transferred to and misused by a hostile or repressive foreign state. As such all applicants should

ensure they are familiar with the Academy's Policy on National Security-Related Risks.

15.FAQs and good practice

Please visit our website to view a list of frequently asked questions (FAQ) Below is a list of suggestions that may help to improve the quality of your application. Please note, that these points are intended for the benefit of the applicant but in no way do they guarantee the success of individual applications. Awards will be made entirely up to the discretion of the Steering Group.

Points which may improve your application:

- Good in-kind and monetary support declared by the industrial organisation.

- Clear work packages, milestones, and objectives outlined.

- Consideration of the geographical location of all collaborators involved.

- Contemporary research topic.

- A strong CV.

- A good publication record.

- The application is easy to read and not overly technical.

- Strong letters of support indicating genuine buy in from all parties.

- Clear indication that the industrial organisation is interested or committed to the project, which exceeds simply hosting an awardee.

- Clear indication of how central to the business the nature of this research project is.

- Clear (quick) routes to exploitation defined within the application.

16. Contact

If you have any questions concerning the scheme that are not covered in the FAQ page of our website please email the Programme Manager (research@raeng.org.uk).

Royal Academy of Engineering

Annex 1

10 Royal Academy of Engineering Disciplines:

1) Civil, construction and environmental

Including aspects of civil and structural engineering; construction materials; earthquakes; wind and fire engineering; building engineering physics; construction management; numerical modelling; environmental engineering; water resources and flooding; offshore and coastal engineering; hydraulics; climate change and sustainability; waste management; geotechnical engineering; geomatics/surveying.

2) Materials and mining

Including metallurgy; metal forming; corrosion; failure analysis; structural integrity; non-destructive testing; inspection technologies; failure prevention; fabrication and repair technologies; welding and joining technologies; discovery and development of mineral resources; extraction and processing of minerals; mining engineering; materials performance; materials research; plastics and composites; structural materials (excluding materials specifically covered elsewhere).

3) Chemical and process

Including all aspects of chemical and process engineering; aspects of fuel technology; oil; coal and gas technologies; carbon; carbon sequestration; clean technology; combustion; catalysis; particulates; food processing; fermentation processes; pharmaceutical engineering; biotechnological processes.

4) Aerospace

Including all aspects of aeronautical engineering and aerospace manufacturing; turbomachinery and aerothermal engineering; avionics; radar systems; antennae; satellite systems; autonomous systems; aspects of systems engineering; airlines; materials for aerospace.

5) Transport and mechanical

Including all aspects of mechanical engineering; automotive; rail and marine engineering; transportation infrastructure; engines; turbomachinery; mechatronics; acoustics and vibrations; ultra-sonics; heat and thermodynamics; fluid dynamics.

6) Manufacturing and design

Including manufacturing management and manufacturing process innovation; manufacturing business improvement and re-engineering; CAD/CAM; robotics for manufacturing; engineering design.

7) Electrical and electronic

Including electrical, electronic and control engineering; design for electronics; aspects of nanotechnology and semiconductor engineering; lasers; optoelectronics; photonics; microwave engineering; instrumentation; display technology; solid state electronics.

8) Energy and power

Including energy technologies; electric power and energy systems engineering; nuclear and renewable energy generation; energy infrastructure; management of energy and energy resources for generation, storage and transmission; distribution and conversion of electric energy and power; electricity supply and energy conservation; hydrogen power; fuel cells.

9) Medical and bioengineering

Including all aspects of medical and biomedical engineering; orthotics; prosthetics; ultrasound for medicine; medical scanning and imaging; drug delivery; biomedical materials; tissue engineering; medical devices; medical robotics and computer-assisted surgery.

10) Computing and communications

Including computational and software engineering; informatics; web and data science; telecommunications; mobile telephony; broadband; wireless spectrum; signal processing; television, film and broadcasting; computer and video games; special effects.

Annex 2

This programme most commonly awards grants on the basis that they are for non-economic research conducted with a collaborating industrial organisation. However, should a research organisation declare that an industrial organisation is to gain a direct benefit from the project then the Academy would award the grant under the Streamlined route for RD&I (SC10780) on the basis that it is an industrial research project that represents an indirect subsidy to the industrial organisation. The Academy will not fund projects that would be classified as be feasibility studies or experimental development projects as defined in the Research, Development and Innovation Streamlined Subsidy Scheme guidance.

Should the project be classified as an Indirect Industrial Research project and subsequently awarded as an indirect subsidy to the collaborating industrial organisation then the Academy will need to seek assurances about the level of funding already received by that commercial organisation in respect of the project to ensure compliance with the cumulation rules of the streamlined route, and ensure that funding for that project has not nor will exceed the £3M cap by awarding of the proposed grant.

Per the streamlined route, the subsidy ratios allowed for an Industrial Research Project are: 85% for small enterprises, 75% for medium-sized enterprises, and 65% for large enterprises with the enterprise required to commit to, and demonstrate input at, the required level to comply with those ratios i.e. if the Academy awarded £85k for a grant and the collaborating commercial organisation was a small enterprise they would be required to commit and evidence on request the required input £15k of funds for eligible costs under the streamlined route. The Academy will need to review the particulars of the benefits to the industrial organisation. Further investigations will need to be carried out to ensure that we comply with funder regulations as per section 14 of the Research, development and innovation streamlined route guidance pertaining to the 'Subsidy Control Act 2022'.