Distributed Peer Review: Faraday Institution PhD/ EngD Studentships (commencing October 2027)

Introduction

Following the successful pilot of the Distributed Peer Review (DPR) process, the Faraday Institution has adopted this approach for this call. More details and background information on DPR and its success can be found in Patat et al. (2019). This process was introduced by Merrifield & Saari (2009) and used in a number of calls including by the European South Observatory, Volkswagen Foundation and the National Institute of Food and Agriculture. UKRI has used the method to assess their UKRI Metascience Unit AI early career fellowships.

The primary supervisor of proposals submitted through this process must agree to review up to five proposals submitted by their peers during the same cycle. Similarly, they accept that their proposals will be reviewed by an equal number of peers who submitted proposals in the same cycle.

The deployment of DPR at the Faraday Institution stems from the current landscape where there have been very few PhD / EngD studentships funded in battery research over the previous few years, and that a large number of applications are expected. An efficient and effective mechanism is therefore required to assess proposals.

This process comes with some additional benefits:

- Reduces workload on panels and programme management, making it easier to secure qualified reviewers.
- Improves feedback quality by easing reviewer load.
- Enables better matching between specialised proposals and expert reviewers.
- Broadens participation, allowing more researchers to influence the Faraday Institution's scientific direction.
- Reduces IP risk by limiting the number of people reviewing each application.

This document has been developed using insights from the **Research on Research Institute** and the **European South Observatory**, which served as foundational references for the design of this process.

Distributed Peer Review process

At the application stage you will be prompted to formally accept the conditions of the DPR.

You will also be asked to select two keywords that most closely matches the area of specialism of the proposed PhD / EngD studentship research topic.* This will help us match proposals to areas of specialism of reviewers.

Initially, reviewers for a given application will be assigned randomly based on the selected keyword. Faraday Institution HQ staff will reassign reviewers where there are obvious conflicts

of interest at this point. You will then receive an email inviting you to log into Flexi-Grant, where you will be given access to the applications assigned to you.

You will be asked to review 5 applications against the scoring criteria highlighted below. You will have two weeks to review. We currently propose these dates as 11-25th January 2026.

Subsequent stages in the selection process are outlined in the main call document.

Rules and guidelines for applicants

By submitting a proposal for this call, applicants are committing to following the rules and guidelines for applicants.

1. Failing to provide the reviews by the deadline 25th January may lead to the rejection of the proposal submitted.
2. Upon submitting the application, you will have signed the non-disclosure agreement. For that reason, the review process MUST be completed by the individual who signed and submitted the application.
3. The reviewer is expected to carefully read the 5 assigned proposals, grade them and write feedback for the submitter.
4. Reviewers are expected to behave ethically. This includes confidentiality and providing unbiased scoring. Reviewers are expected to provide considered, constructive feedback, using appropriate, factual and non-offensive language. Comments will be passed unedited to the applicant.
5. During the review process, reviewers will have the opportunity to declare any scientific or personal conflicts on each application and the nature of that conflict. The process will ask you to proceed with the review process in such cases. Members of FIHQ will remove the scores of reviewers where there is a major conflict.
6. Reviewers are expected to focus on the science and the objectives they want to achieve, not the scientists. Due to the nature of the process, reviewers will know the identity of the applicant. They in return will know your identity as a reviewer (but will not know which feedback is associated with which reviewer).
7. As a reviewer, you must provide your feedback in a completely anonymous way. The phrasing must be neutral and must not disclose your identity, directly or indirectly,

Failure to meet these guidelines may result in your application being terminated.

Confidentiality

All content of the proposals reviewed during DPR is covered by intellectual property rights and must not be copied, shared or retained after the review period. Reviewers are bound by the non-disclosure agreement signed upon proposal submission and must uphold the highest standards of probity.

Scoring and Feedback

Proposals will be assessed using a numerical scale from 1 to 5 (whole numbers only, no decimal scoring). Each application will be evaluated independently against the following criteria:

- Quality of the science
- Intended impact on the global battery sector
- Alignment with Faraday Institution goals,
- Advancement of state-of-the-art science
- UK Battery sector relevance & impact
- Supervisory and group support
- Third party engagement & contribution.

The other sections are more straightforward, focusing on numerical contributions, which are predefined and assessed on a pass/fail basis.

Category	**Scoring**
Project summary - Quality of the science	5 Highly novel, original idea with strong scientific foundations. Clearly articulated methodology, objectives, and hypotheses. Robust design with thorough risk mitigation and feasibility. 4 Good level of innovation and scientific merit. Mostly clear methodology and approach. Minor gaps in explanation, but generally well thought out. 3 Some novelty or incremental contribution. Scientific basis is sound but not particularly innovative. 2 Fair/limited innovation. Weak articulation of research aims or methodology. Scientific rigour not well demonstrated. 1 Lacks novelty or a compelling scientific rationale. Unclear or incoherent methodology. 0 Minimal rigour.
Intended impact on the global battery sector	5: Strong, well-defined impact on industry, academia, or technology. 4: Good impact described, with clear relevance and potential benefits, though slightly less comprehensive than a top-scoring submission. 3: Moderate or indirect impact described. 1-2: Weak or unclear impact statement, with minimal evidence or relevance provided. 0: No impact described or statement entirely irrelevant.
Alignment with Faraday Institution goals	2: Clear, strong alignment with the Faraday Institution project and could be embedded in to one. 1: No alignment with the Faraday Institution's projects, but aligned with the aims of the call. 0: Weak/No alignment, with limited explanation or relevance to Faraday's mission and call aims.
Advancement of state-of-the-art science	5: Highly original, ground-breaking research with clear potential for major impact. 4: Innovative work with meaningful advances and clear novelty. 3: Some originality; incremental improvement on existing knowledge. 2: Limited advancement; unclear contribution to the field. 1: Minimal innovation; largely repeats existing approaches. 0: No advancement described.

UK battery sector relevance & impact	5: Transformational: Clear breakthrough potential; strong pathway to major industrial benefit and competitiveness. 4: Significant: Strong relevance with clear, tangible benefits to industry in performance, cost, or supply chain. 3: Moderate: Addresses an industry challenge; impact is useful but incremental or less clearly defined. 2: Limited: Some relevance, but weak or uncertain pathway to industry benefit. 1: Minimal: No clear contribution to UK battery industry advancement. 0: No advancement described.
Primary supervisor and group engagement	2: Clear, distinct, contribution with investment from supervisor, lab group and support network. 1: Some contribution but lacks detail. 0: No significant contribution
Secondary supervisor/ Third party supervisor	2: Clear, distinct, valuable contribution to project. Including: equipment, supervision, equipment. 1: Some contribution but lacks detail. 0: No significant contribution
Contribution in letter of support and application (option 2 only)	2: Clear, distinct, valuable contribution to project. Including financial, equipment, supervision. 1: Some contribution but lacks detail. 0: No significant contribution
Internship provision (3-6 months or longer if international)	3: International academic internship 1.5: Yes UK academic lab or industry internship 0: No.

Following the DPR process the Faraday Institution HQ team will review the project and apply the following points

Third party funding contribution	5: Equivalent of 2 year's funding. Third party organisation is providing £27,016.00/£29,016 or more per year for 2 years. (50% of the PhD/EngD (industry only) 4: Equivalent of 2 year's funding. Third party organisation is providing £27,016.00/£29,016 or more per year for 2 years. (50% of the PhD/EngD (university or Research Organisation only) 3: Equivalent of 1 year's funding. Third party organisation is providing £27,016.00/£29,016 for 1 year (both industry and academia) 0: Less that a 1 year's fees to £0

Written feedback should take the form of a clear, concise summarising the reasons for the scores awarded, highlighting both the main strengths and weaknesses of the proposal. Please observe the following principles:

- **Do not try to second-guess funding outcomes**. Your role is to provide an independent assessment of the proposal. Remember that you are reviewing only a small subset of applications and the final score will be an aggregated average across 4 other reviewers.
- **Refer to the scoring criteria.** Ensure that your comments are explicitly linked to the agreed assessment categories listed above.

- **Base assessment solely on the proposal content**. Evaluation should focus on the scientific and technical merit of the written submission. While references to published work may be included, they are provided for context and should not be essential for a general understanding of the proposal. Consultation of external material is not expected.
- **Declare your expertise level**. If you feel that you do not have sufficient expertise in the specific field, please indicate your expertise of level when submitting the review. If in doubt, contact training@faraday.ac.uk. Applicants are instructed to write proposals clearly for a broad research audience.

Guidance for Constructive Reviewer Feedback

The DPR process is designed to provide applicants with constructive and actionably feedback. Review comments should highlight the main strengths and weaknesses of the proposal, ideally suggesting ways that its quality and clarity might be improved.

Balanced and Objective Assessment

- Summarise both key strengths and major weaknesses to help applicants understand which aspects of the project are strong and which need improvement.
- Focus on substantive issues, not minor flaws. If a proposal is fundamentally sound, but less compelling than others, acknowledge this clearly.
- Be as specific with comments; avoid generic statements that could apply broadly. Support critiques with references if necessary.
- Write impersonally, referring to "the proposal" rather than the applicant; e.g., "The proposal does not..." instead of "The applicant did not...".

Tone and Professionalism

- Use clear, constructive, and respectful language.
- Do not use offensive or sarcastic expressions, regardless of your assessment of the proposal's quality.
- Feedback will be passed directly to applicants, so you are responsible for ensuring your comments are professional and appropriate.

Clarity and Brevity

- Reviews should be informative and concise. A well-written paragraph is sufficient if it conveys clear and specific feedback.
- Avoid brief, generic remarks, which offer little value and may prompt unnecessary follow-up from applicants.

Other best practices

- Do not summarise the proposal: applicants already know its content.
- Avoid references to other proposals you are reviewing.

- Phrase feedback so it is relevant regardless of whether the application is ultimately funded.
- After completing your reviews, re-read your comments from the applicant's perspective to ensure they are helpful and constructive.
- Ensure your stated strengths and weaknesses are consistent with the scientific merit implied by your numerical score and that low scores are accompanied by clear reasons.

Reducing bias

A Faraday Institution HQ team will oversee the DPR process.

- Statistical analysis (including but not limited to z-scores, range scores, and min–max scores) will be conducted. Proposals within the top 15% showing the largest scoring ranges will be subject to internal re-review to ensure consistency and fairness.
- Reviewers will not be assigned to applications where conflicts of interest are identified in advance, and all declared conflicts will be carefully reviewed. While reviewers are generally expected to assess all assigned submissions, any scores from reviewers with significant conflicts will be excluded from the final average.
- Providing multiple reviewers: Each submission will be evaluated by five reviewers to minimise the effect of individual biases.

Frequently Asked Questions on Distributed Peer Review

Why has the Faraday Institution introduced DPR?

The Faraday Institution has introduced DPR following discussions with its community regarding review processes. Various options were considered, including FIHQ-only reviews, reviews by project PIs, and panel reviews from across the community, but an open call is expected to generate many proposals and require broad participation.

DPR provides advantages over traditional panels, such as greater flexibility in reviewer matching and reducing individual reviewer burden. This is a pilot initiative, and community feedback is encouraged to improve robustness. Feedback can be sent to training@faraday.ac.uk.

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Who will review my proposal?

All lead applicants who submit proposals will act as reviewers. Submission of an application obligates the applicant to review up to five proposals from other participants in the same cycle. Likewise, each submitted proposal will be reviewed by a comparable set of peers.

Which tool will I use to review the proposals assigned to me?

Reviews will be conducted through the Flexi-Grant system, which is a straightforward, browser-based platform used for proposal submission and review tool. You will have registered on it when submitting your application.

When is the deadline for delivering my reviews?

25 January 2027

How much time do I have to complete my reviews?

Approximately 2 weeks will be provided to complete your reviews.

What happens if I do not submit my reviews by the deadline?

Failure to complete reviews by the stated deadline may result in rejection of your own proposal submission.

I am a battery expert, but I do not feel comfortable reviewing a proposal outside my specific area.

If you do not feel sufficiently expert in the specific sub-field, declare your expertise level and proceed with the review based on your broader competencies. If uncertain, contact training@faraday.ac.uk. Applicants have been instructed to write proposals for a broad research audience ¡

I have been asked to review an application, but I didn't submit one.

Per the Non-Disclosure Agreement, only applicants who submitted proposals may complete reviews. Please report any such issues to training@faraday.ac.uk.

Why is the Faraday Institution asking me to provide feedback on the quality of comments I receive in the DPR process?

DPR aims to increase the quality of peer feedback, especially in a call with a large number of submissions. Applicants will be asked to evaluate the usefulness of the feedback received, which will inform improvements to the system. A survey will be sent to applicants approximately one month after the process has finished.

Why is Faraday asking about my areas of expertise for the DPR proposals I am reviewing? How will this information be used, and by whom?

Self-declared areas of expertise enable the Faraday Institution to match proposals to reviewers with relevant knowledge wherever possible.

Will I be assigned exactly five proposals?

Not necessarily. Five is the maximum, but the actual number may be lower due to conflict of interest management and subject-specialism matching.

Will my proposal be reviewed by a range of academics? Does Faraday plan to weight the reviews based on seniority?

Each proposal will be reviewed by up to five peers, reflecting the diversity of the applicant pool. No weighting based on reviewer characteristics such as seniority will be applied.

What are the Faraday Institution's future plans for DPR?

This is a pilot process. If successful, DPR may be extended to other calls in the future. Ongoing feedback is welcomed.

How will the Faraday Institution monitor the performance of DPR?

Performance will be evaluated using measures such as scoring deviation, reviewer feedback, and responses to the post-review survey.

I'm concerned that my proposal may be seen by a random person. Could this lead to plagiarism? How will Faraday prevent this?

Unlike traditional panels, where panellists may see all proposals, DPR limits each reviewer to a maximum of five. Applicants are asked not to include IP-sensitive material and reviewers must agree to confidentiality as a condition of participation.