Call for proposals for Faraday Institution / ISIS Neutron and Muon Source studentship

# Introduction

The Faraday Institution funds universities to recruit students to become part of the Faraday Institution PhD programme, with cohort intakes from 2018 onwards. Proposals for topics are now sought for the **2022** cohort.

**Underwriting support for the 2022 cohort has not yet been secured through the Faraday Battery Challenge and EPSRC; discussions are ongoing and a decision is expected this Autumn.** Should underwriting for the 2022 cohort be confirmed, the Faraday Institution will be in a position to fund one joint funded position with the ISIS Neutron and Muon Source with an October 2022 start date.

The Faraday Institution and ISIS Neutron and Muon Source are looking to fund a PhD studentship project that enables electrochemical energy storage research and develops the electrochemical energy storage capabilities at the ISIS Neutron and Muon Source. The project may focus on any technique, software or sample environment development, but they must include facility development, and should be of wider use to the electrochemical energy storage field and neutron facility beyond the immediate PhD student project.

The Faraday Institution funds universities to recruit students to become part of the Faraday Institution PhD programme conducting research in electrochemical energy storage and related fields. The ISIS Neutron & Muon Source co-funds PhD studentship projects, which focus on the development of ISIS facility capabilities.

Recognising the opportunity to recruit a PhD researcher to work in the energy storage research field, together with ISIS facility development, the Faraday Institution and ISIS Neutron and Muon Source will jointly fund **1 studentship** **in 2022**; eligibility for students is as for [EPSRC UKRI studentships](https://epsrc.ukri.org/skills/students/guidance-on-epsrc-studentships/eligibility/).

The Faraday Institution Cluster PhD researchers receive an enhanced stipend over and above the standard EPSRC offer. The total annual stipend is approximately £20,000 (plus London weighting) plus an additional training package worth £7,000 per annum to cover training and travel costs. Recipients will have access to multiple networking opportunities, industry visits, mentorship, internships, as well as quality experiences that will further develop knowledge, skills, and aspirations. Click for details of the current [Faraday Institution Training Programme](https://faraday.ac.uk/wp-content/uploads/2020/09/PhD_Training_Programme_Guide_2020-21.pdf).

# What will we provide

The Faraday Institution and the ISIS Neutron and Muon facility will provide 100% funding (50% from ISIS, 50% from the FI) for the studentship including any fees required by the host University.  The student will need to be registered at the host university, and ISIS and the FI will make payments to the University to cover the stipend and fees. The FI and ISIS (STFC/UKRI) will set up an agreement with the host university which specifies a schedule for payments to the university to cover the studentship, together with other details of the working arrangements for the studentship.

In addition, up to £2000 per year per student for travel and consumables (to be claimed *by the student* against actual receipted expenditure) will also be available for research training expenses including the cost of travelling to and from the Rutherford Laboratory or travel to / from training courses. Costs for the training courses run by the Faraday Institution in line with the Training Programme will be paid for internally and not charged back to your grant.

# Criteria

Studentships will be awarded to the best proposals received by the closing date of **26th November 2021**. Proposals will be reviewed by a panel of ISIS and Faraday experts who will look at the scientific quality of the proposal (40%), the facility development aspect of the project (40%) and the quality of the PhD training provided (20%).

Proposals must be in the area of electrochemical energy storage and be aligned with the goals and research challenges of the Faraday Institution and of the ISIS Neutron and Muon Source. An ISIS staff scientist must be a co-applicant and co-supervisor and play a full and equal role in the studentship project and supervision, including the interviewing of potential candidates.

The student must spend at least one year of their time at ISIS, in addition to normal short trips for experiments, during their PhD (in a schedule to be arranged by mutual agreement between the ISIS and university supervisor).

Topics

* Proposals must be in the area of electrochemical energy storage and be aligned with the [goals and research challenges](https://faraday.ac.uk/research/) of the Faraday Institution. However, proposals should be able to stand alone such that the studentship can be completed regardless of the funding status of any existing project.
* When selecting PhD topics for submission, projects are asked to **prioritise the highest quality science topics** (noting that all battery related disciplines will be considered). Please also evaluate the impact the topic will have in solving the current challenges industry partners are seeking to solve.
* Proposals from new supervisors are welcomed.

# Allocation of studentships

* There is one joint Faraday / ISIS studentship available. The PhD Researcher will join the Faraday Institution cohort for training events.
* Pool of applicants will be reviewed by ISIS and Faraday expert panel to determine the final selection.

# Criteria

Proposals will be judged on the quality of the project proposed, by a diverse panel of ISIS and Faraday experts.

The process for evaluating proposals is based on the following principles:

1. **Quality (40%)**. Projects selected for funding must demonstrate a high scientific and technical quality.
2. **Facility Development (40%).** Projects must demonstrate some aspect of facility development as central to the proposal.
3. P**hD Training (20%).**

# How to Apply

Application should be made using the form below to Professor Martin Owen Jones ([martin-owen.jones@stfc.ac.uk](mailto:martin-owen.jones@stfc.ac.uk)) on or before 5pm of the 26th November 2021. The completed proposal form should not be more than three pages in length.

# Proposal for a Faraday Institution PhD Studentship

|  |  |
| --- | --- |
| University |  |
| Research challenge with which the proposal is associated |  |
| Supervisor name |  |
| Supervisor email |  |
| ISIS Supervisor name |  |
| ISIS Supervisor email |  |
| PhD project title |  |
| Project summary (max 300 words) |  |

|  |
| --- |
| 1. Please explain how this project demonstrates high scientific and technical quality |
|  |
| 1. Describe how this project would contribute to facility development |
|  |
| 1. Please state the training that will be provided to support the professional development of the PhD Researcher |
|  |

**TIMELINE**

|  |  |
| --- | --- |
|  | **Date** |
| *FI and ISIS Call for Studentships* | Opens 18th October 2021 |
|  | Closes 26th November 2021 |
| *ISIS Panel Meeting* | Week of 6th December 2021 |
| *Announcement of Results* | December / January 2022 |

# The decision to award studentships by the panel of experts is final and based on the criteria above. Feedback will be provided on topics that are not selected on request. Projects will be notified of whether proposals are successful by December 2021 or January 2022.