Exciting Faraday Undergraduate Summer Experience (FUSE) paid internship opportunities for summer 2026.

Studying a STEM degree? Wondering what career to pursue? Interested in finding out more about the battery sector? Keen to spend time with a dynamic community of pioneering battery researchers seeking to find solutions to support a fully electric future?

The Faraday Institution is offering a total of 48 internships, for undergraduate students to spend 8-weeks working on battery related projects.

Deadline for applications April 24th 2026

Project title:

Assessing Carbon-Dispersion Metrics for Improving Battery Electrode Slurry Mixing Quality Control

Project description:

The slurry mixing process parameters strongly determine battery electrode microstructure and, therefore, performance. However, the absence of a widely adopted metric for quantifying and optimising conductive additive dispersion complicates material and formulation research and adds to manufacturing variance. During slurry preparation active materials, binders and conductive additives must be dispersed to an optimal, precisely controlled degree. Active material agglomeration can be assessed using established methods (e.g., Hegman gauge), but the direct measurement of complex conductive additive networks is more challenging.

This lab-based project will develop and apply metrics at WMG to quantify carbon dispersion involving stabilising using a surfactant, separation by centrifuge, and particle-size analysis via laser diffraction. The applicant will apply strong practical laboratory skills and gain hands-on experience in battery manufacturing. They will be supported to design and execute experimental programmes, establish robust characterisation procedures, and analyse and interpret data. These experiences will equip them with a solid foundation for a future career in scientific research, within industry or academia.

The applicant will also collaborate closely with researchers and engineers in the BMAC group at WMG. This engagement will provide a broader appreciation of the challenges shaping the battery sector, as well as exposure to a diverse multidisciplinary research team, potential role models, and opportunity to develop their network.

Supervisor:

Dr Philip Bellchambers, Dr Matthew Capener (BMAC Research Group)
https://warwick.ac.uk/fac/sci/wmg/research/research-areas/battery-materials-and-cells/

University:

WMG (EIC), University of Warwick

Location:

In-person at the University of Warwick *(laboratory-based role)*

Start date:

The internship is a full-time role for 8 weeks to be completed between June 1st and 29th August 2026. Exact dates are negotiable.

Eligibility:

- Experience of working safely in a chemical laboratory setting with chemicals and analytical equipment, and following Risk assessments, SOPs and COSHHs
- Good attention to detail with experience of keeping detailed experimental notes
- Familiarity with software for and experience in statistical analysis, plotting, and interpreting experimental data
- Ability to review and analyse literature
- Good problem-solving skills
- Have an interest in batteries and energy storage systems
- Confident communicator, verbal and written
- Be a registered full-time undergraduate student (STEM Subject) from a UK university
- Undertake the internship within the years of their undergraduate study (i.e., not in their final year or during a subsequent Masters' programme)
- Cannot have been a FUSE intern in a previous year

Funding:

A salary of £12.83/hour will be provided. The funding is provided by the Faraday Institution.

Additional activities:

During the FUSE internship you will be able to attend Faraday Institution cohort events which will focus on a variety of topics to further develop your understanding of career opportunities in battery sector. At the end of the programme, you will be invited to share a poster about your work and prizes will be awarded.

Application:

In order to apply for this Faraday Undergraduate Summer Experience (FUSE) 2026 internship, you need to email a **combined 2 page** academic CV and cover letter to philip.bellchambers@warwick.ac.uk clearly outlining your;

• Experience against the criteria outlined above
• Reason for application to this role

For administrative purposes, please include details of any further FUSE internships applied to.

The applicant should be available for an interview before 7th May.

Please also complete this survey (https://www.surveymonkey.com/r/38SVLNK) so we can keep you informed about future Faraday opportunities, including other FUSE internships that may need additional support with recruitment.

Diversity

The Faraday Institution is committed to creating a dynamic and diverse pool of talent for the fields of battery technology and energy storage.

We at the University of Warwick are committed to creating an inclusive and accessible recruitment process. If reasonable adjustments or accommodations can be made to support your application or participation at any stage, please let us know and we will be happy to help.