

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.

Project title: Next generation multi-physics models to unravel a solid-state battery breakthrough

Project description:

Solid-state batteries are arguably the most exciting development in battery technology. They would revolutionise electric storage, increasing energy density and lifetime, enabling faster recharging, and avoiding safety problems inherent to current (flammable) batteries. Promising achievements have been claimed, with solid electrolytes exhibiting remarkable conductivity levels. However, commercialisation is hindered by material degradation phenomena at the electrolyte-electrode interfaces, from the nucleation and growth of dendrites (needle-like structures) at the Li metal anode-electrolyte interface to the debonding of cathode particles from the electrolyte matrix. Faraday's project SOLBAT is using state-of-the-art experimental techniques to bring new, critical insight into these degradation mechanisms and there is an opportunity now to use multi-physics computational models to integrate that insight, complement experiments and conduct efficient "Virtual experiments" that can unravel new cell configurations and materials, accelerating the development of all-solid-state batteries.

You will work with other computational and experimental researchers, using the finite element package COMSOL Multiphysics to simulate material behaviour in all-solid-state batteries. You will communicate findings in group and project meetings and get the chance to experience what the day-to-day of a research group looks like. You will acquire a set of skills that will allow you to tackle a wide range of challenges.

Supervisor: Prof. Emilio Martinez-Paneda

University: University of Oxford

Location: Oxford (in-person)

Start date: The internship is a full-time role for 8 weeks, starting on June 1st and to be completed by August 29th, 2026.

Eligibility:

- Be registered full-time undergraduate student from a UK university.
- Undertake the internship within the years of their undergraduate study (i.e., not in final year or during a subsequent Masters' programme).
- Not have been a FUSE intern in a previous year

Funding:

A salary of £13.45/ 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 a Faraday Undergraduate Summer Experience (FUSE) 2026 internship, you need to send your CV and academic transcripts to Dr. Sourav Chatterjee (sourav.chatterjee@eng.ox.ac.uk) and Prof. Emilio Martinez-Paneda (emilio.martinez-paneda@eng.ox.ac.uk). The deadline for applications is **25 April 2026**.

Please also complete this [survey](#) 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.

Equality, diversity and inclusion concern every member of our community at the University of Oxford. The University of Oxford is committed to fostering an inclusive culture which promotes equality, values diversity and maintains a working, learning and social environment in which the rights and dignity of all its staff and students are respected. We recognise that the broad range of experiences that a diverse staff and student body brings strengthens our research and enhances our teaching, and that in order for Oxford to remain a world-leading institution we must continue to provide a diverse, inclusive, fair and open environment that allows everyone to grow and flourish. For more information, go to our dedicated Diversity and Inclusion webpages <https://edu.admin.ox.ac.uk/home>