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 internships, for undergraduate students to spend 8-weeks working on battery related projects.

Project title

Local Structural Effects of Dopant Substitution in Sodium-Layered Cathode Materials

Project description

O3-type sodium layered cathodes are promising materials for sodium-ion batteries, and their structures can be tuned through dopant substitution. In this project, undoped sodium nickel oxide will be synthesized using a solid-state method, while doped samples will be prepared via a combined synthesis approach. The primary objective is to investigate how dopant substitution affects the local structure of O3-type sodium nickel oxide. Solid-state ^{23}Na nuclear magnetic resonance (ssNMR) spectroscopy will be used to probe the local sodium environments within the layered structure. This study will provide insights into local structural modifications that are not accessible through conventional diffraction techniques and will demonstrate the utility of ssNMR for characterizing layered sodium-ion battery cathode materials.

Supervisor Dr Tetiana Voitenko, in the group of Prof Dame Clare Grey

University University of Cambridge

Location In-person, in Cambridge

Start date The internship is a full-time role (37 hours a week) for eight weeks during June – August 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 £12.71/ 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

To apply, please complete this survey by 23.59 on 26 April 2026.

For project information, please visit https://faraday.ac.uk/research/lithium-ion/extending-battery-life/

Diversity

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

The University of Cambridge is committed in its pursuit of academic excellence to equality of opportunity and to a pro-active and inclusive approach to equality, which supports and encourages all under-represented groups, promotes an inclusive culture, and values diversity.