Exciting Faraday Undergraduate Summer Experience (FUSE) paid internship opportunities for summer 2024.

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 55 internships, for undergraduate students working on battery related projects.

The Electrochemical Innovation Lab at UCL will host one intern placement within the SAFEBATT project.

Project title: Exploring the Application of Acoustic Techniques to Improve Battery Safety

Project description:

Ensuring battery safety is one of the most important factors when developing systems for electric vehicles. To ensure the safe operation of batteries diagnostic techniques can be deployed, to track the behavior and provide a fingerprint of the current state of health of a system. These techniques can include thermal and electrical characterisation, however over the last few years acoustic tools have increasingly been deployed. Acoustic spectroscopy enables scientists to listen to the processes, which occur in a battery during operation and identify abnormal behavior, which can predict the early degradation or ultimately the failure of a cell. The FUSE intern, supported by researchers at UCL, will support existing research attempting to develop a comprehensive understanding of the 'sound of batteries'. The intern will track the characteristic response of a battery during operation and correlate the signal with key markers in the electrochemical response of a cell. In doing this the intern will be contributing to a better understanding of the 'Science of Safety' and improving the fundamental understanding which is required to avoid battery failure.

Supervisor: James Robinson (and Arthur Fordham)

University: University College London

Location: In-person

Start date: The internship is a full-time (36.5 hours per week) role for 7 weeks during June – September 2024. Start date is flexible, to be agreed with the project lead.

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 £12.00/ hour across the UK or £13.15 / hour in London will be provided. This will be determined by the working address of the appointee, not the university's location. The funding is provided by the Faraday Institution.
You will be paid via the UCL recruitment agency UniTemps.

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 to share a poster about your work and prizes will be awarded.

Application:

In order to apply for a Faraday Undergraduate Summer Experience (FUSE) 2024 internship, you need to send your CV to Lizzie Howie (l.howie@ucl.ac.uk) and complete the survey The deadline for applications is 26th April 2024

Diversity:

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

As London's Global University, we know diversity fosters creativity and innovation, and we want our community to represent the diversity of the world's talent. We are committed to equality of opportunity, to being fair and inclusive, and to being a place where we all belong. We therefore particularly encourage applications from candidates who are likely to be underrepresented in UCL's workforce.

You can read more about our commitment to Equality, Diversity and Inclusion here : https://www.ucl.ac.uk/equality-diversity-inclusion/