**Job Title:** Research Associate - Faraday Battery Challenge: Sodium-nickel chloride (NaNiCl₂) prototype battery system

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<th><strong>Present Grade:</strong> 6P</th>
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**Department/College:** Department of Engineering

**Directly responsible to:** Professor Andrew Kennedy

**Supervisory responsibility for:** N/a

**Other contacts** Dr David Cheneler

**Internal:**

*University:* Staff and postgraduate students of the Engineering Department, Research & Enterprise Services staff concerning Faraday Challenge and relations between the University and LiNa.

**External:**

*LiNa:* Key stakeholders, Innovate UK Monitor, Project Partners

**Major Duties:**

The Research Associate will drive and lead a project that will deliver a validated numerical (FEA/CFD) model that can optimise the design of battery packs to improve thermal management, as well as inform best practice for monitoring their performance during use. They will be supported by academics from the Department of Engineering and by industry partners at LiNa.

**Key Responsibilities**

Under the supervision of academics from the Department of Engineering, the Research Associate will:

- Measure the geometry and performance of the current battery system and create a CAD model.
- Create an FEA/CFD model of the battery system and validate this against experimental data.
- Use the modelling tool developed to optimise battery design.
- Produce technical reports and reviews in accordance with project milestones and deliverables.
- Ensure that the research outcomes are disseminated to the partners via presentations and structured meetings.
- Manage the project including maintenance of project plans, and organisation of project-related meetings.
- Liaise between LiNa and the academic team.
- Occasionally at the request of supervisors, perform other duties which are not included above, but which will be consistent with the role.