**JOB DESCRIPTION**

**Senior Research Associate: Solid-State NMR Characterisation of Lithium-ion Battery Cathode Materials**

Vacancy Ref: A3055

<table>
<thead>
<tr>
<th>Job Title: Senior Research Associate</th>
<th>Present Grade: 7</th>
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<tr>
<td><strong>Department/College:</strong> Chemistry</td>
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<td><strong>Directly responsible to:</strong> Dr John Griffin</td>
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<td><strong>Supervisory responsibility for:</strong> Some supervision of postgraduate students and PDRAs</td>
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**Other contacts**

**Internal:** Academic staff and PDRAs in the Department of Chemistry

**External:** The Faraday Institution, specifically the FutureCat project led by Prof. Serena Corr, University of Sheffield

**Major Duties:**
The Senior Research Associate will carry out research into the structure and lithiation mechanisms of lithium-ion battery cathode materials. This will involve carrying out a combination of in situ and ex situ measurements and development of new experimental NMR techniques. Most samples will be provided by collaborators, but some battery assembly and testing will be required.

**Key Responsibilities**
Under the supervision of Dr John Griffin you will be responsible for:

- Performing solid-state NMR measurements on as-synthesised and cycled battery materials
- Assembly and electrochemical testing of battery cells
- Related characterization such as X-ray diffraction and microscopy
- Contribute to the running of the research group, by providing technical training and contributing to resource management (ordering, generating health and safety documentation, etc.)
- Prepare internal reports as well as progress reports for the NEXGENNA consortium and Faraday Institution
- Participate in the normal activities of the research group, including meetings and presentations
- Helping to supervise and train postgraduate students
- Prepare manuscripts for publication
- Disseminate research findings at national or international meetings and conferences
- Undertake necessary training and development
- Other duties commensurate with the grade of the post, as directed by the supervisor