

JOB DESCRIPTION
Research Associate
Vacancy Ref: A2073

Job Title: Research Associate - Synthetic Chemistry for Redox Flow Batteries	Present Grade: 6P
Department/College: Chemistry	
Directly responsible to: Dr Kathryn Toghill	
Supervisory responsibility for: Part responsible for some PhD students and final year undergraduate students	
Other contacts	
Internal: Postgraduate and Undergraduate Students, Academic and Non-Academic within the University	
External: Click here to enter text.	
Major Duties:	
<ol style="list-style-type: none"> 1. To conduct a range of experiments to investigate known and new metal complexes with redox non-innocent ligands as potential mediators for flow batteries. Includes undertake the rationale design and synthesis of specific compounds to elicit specific desirable properties. 2. Generate a database of compounds and their relevant properties, both from existing literature, and new compounds designed and developed in the laboratory. 3. To become proficient in basic electrochemical testing, H-cell and flow cell analysis. 4. To contribute to the day-to-day running of the physical laboratory, including the upkeep of safety documentation and the organization of training for new staff and students. 5. Participation in regular project meetings with colleagues at Lancaster and preparation and presentation of talks, posters and reports to disseminate the results of these studies. 6. Participation in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field. 7. Preparation of journal papers for publication of project findings. 8. Participation in writing new research proposals that build on the expertise developed in this project. 	