

JOB DESCRIPTION

Research Associate: Informing Battery Research through Electrochemical Surface Science

Vacancy Ref: A2692

Job Title: Research Associate	Present Grade: 6
Department/College: Chemistry	
Directly responsible to: Dr Stijn Mertens	
Supervisory responsibility for: No one	
Other contacts Internal: Academic staff in Energy Lancaster, Postgraduate and Undergraduate students and Professional Support Staff	
Major Duties: 1. To conduct a range of experiments to investigate the initial stages of cathodic electrolyte interphase formation on well-defined manganese containing battery electrode materials, and the ageing during charging/discharging. 2. To perform voltammetry, impedance measurements and scanning probe measurements (in particular electrochemical STM and/or AFM) on these electrode materials, and to determine element dissolution by chemical analysis. 3. To contribute to building up and the day-to-day running of the electrochemical surface science laboratory, including the upkeep of safety documentation. 4. 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. 5. Participation in writing research proposals that build on the expertise developed in this project. 6. Preparation of journal papers for publication of project findings.	