JOB DESCRIPTION

Vacancy Ref: A2264

Job Title: Research Associate: Advanced Battery Testing	**Grade:** 6
Department/College: Chemistry / Energy Lancaster	
Directly responsible to: Prof Harry Hoster (Director Energy Lancaster);	
Supervisory responsibility for: none	

Other contacts

Internal:

Energy Storage Group, Department of Chemistry, Energy Lancaster, Department of Engineering

External:

Faraday Institution, Multi Scale Modelling (MSM) Consortium, Johnson Matthey, BMW, Jaguar Land Rover, Technical University Munich, Warwick Manufacturing Group, Imperial College, University College London, University of Oxford

Major Duties:

1. To make Lancaster's battery testing facilities available to our industry partners.
2. The battery test methods include (i) entropy profiling and thermodynamic analyses, (ii) High-Precision Coulometry (HPC), and (iii) established "standard" methods (cycling, GITT, dQ/dV, …).
3. To apply those methods on commercially available lithium ion cells and on prototype cells as used in existing and upcoming research collaborations.
4. To write a "brochure" level report to provide an overview of the capabilities of our new battery labs.
5. To contribute to our research projects on battery lifetime predictions and battery modelling.
6. To support operation and growth of the battery test laboratory.
7. To contribute to the day-to-day running of the Energy Storage group at Energy Lancaster, including the upkeep of data-related documentation and the organization of training for new staff and students.
8. To participate in regular project meetings with industrial and academic partners; preparation and presentation of talks, posters and reports to disseminate the results of these studies.
9. To participate 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.
10. To prepare journal papers for publication of project findings.
11. Any other duties appropriate to the grade as delegated by Dr Nuria Tapia Ruiz and Prof Harry Hoster.