

JOB DESCRIPTION

Vacancy Ref: A2229

Job Title: Lecturer in Electrochemical Surface Science		trochemical Surface Science	Grade: 7/8
Department/College:		Chemistry / Energy Lancaster	
Directly responsible to:		for research: Prof Harry Hoster (Director Energy Lancaster);	
		for teaching: Prof Peter Fielden (Head of Chemistry)	
Supervisory responsibility for:		1-2 PhD students and 1-2 PDRAs (funding to be secured)	

Other contacts

Internal:

Energy Storage Group

Materials Science Institute

Department of Engineering (Applied Electrochemistry); Department of Physics (Surface and Interface research)

External:

Industry partners with interests in Fuel Cells / Electrolysis / Electroplating / Batteries

Energy Storage Research Network (ESRN, UK); Faraday Institution

Academic collaboration partners in the UK and overseas, in particular in Liverpool, Erlangen (Germany), Ulm (Germany), DTU (Denmark)

Major Duties:

- 1. To build up a research group with a focus on electrochemical surface/interface reactions with relevance for energy conversion and storage (electrolysers, fuel cells, batteries).
- 2. To operate and upgrade an existing ultrahigh vacuum/electrochemistry transfer system to fabricate and study atomically smooth metal and oxide surfaces as model electrocatalysts.
- 3. To closely collaborate within the Energy Storage Group at Lancaster University and with the Surface Science / thin film researchers in the Physics department.
- 4. To closely collaborate with internal and external partners who focus on theory and modelling of electrochemical systems.
- 5. To actively contribute to method development for an atomic-scale understanding of (electro-)chemical reactions at well-defined surfaces. This may for instance involve fabrication of model surfaces, chemical product analysis, in-situ diffraction, or in-situ spectroscopy.
- 6. To promote and undertake research in areas relevant to existing and new industry partners, also in view of funding opportunities.
- 7. To obtain funding to ensure the sustainability and growth of the energy materials research at Lancaster.
- 8. To contribute to the teaching portfolio of the Chemistry department as delegated by the Head of Department, Prof Peter Fielden.
- 9. To contribute to the wider objectives of the Energy Lancaster and the Chemistry Department.
- 10. Any other duties appropriate to the grade as delegated by Prof Harry Hoster and Prof Peter Fielden.