

Experimental Database Coordinator

REQ221575

Please note that, as part of the University's ongoing commitment to redeployment, this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

Project Description

Job Grade: Specialist and Supporting Grade 6

Job Purpose

The UK National Wind Tunnel Facility (NWTF <https://www.nwtf.ac.uk>), is coordinated by Imperial College London. This initiative involves 22 tunnels distributed across 11 UK universities which are open to external users, both university and industry based. This post comes as the current project moves into a new phase with a greater emphasis on developing a UK and international community network.

This post will lead the development and delivery of an experimental database for the EPSRC National Wind Tunnel Facility (NWTF) Network grant. The NWTF contains a wide range of experimental facilities that generate high quality measurements in a variety of application areas. However, the dissemination of this data is variable and this post will work with groups across the UK to ensure that data is made openly available and that this is accessible, understandable and consistent across the research groups. As such the postholder may be required to make short multi-day visits to other Universities to help facilitate the extraction of data. An example of a typical dataset is available on the Loughborough University data repository:

https://repository.lboro.ac.uk/articles/dataset/Windsor_Body_Experimental_Aerodynamic_Dataset/13161284

Job Purpose

To lead the development and delivery of an experimental database for the EPSRC National Wind Tunnel Facility.

Job Duties

- To develop best practice guidelines for test planning, data collection, data recording and ease of use for CFD community
- To collect, curate and disseminate datasets that have been obtained from NWTF facilities.
- Promotion of the NWTF experimental database nationally and internationally
- Hosting of network meetings to improve dissemination and utilisation of experimental data
- Working with facilities to measure and document key information (e.g., wind tunnel inlet conditions and geometry)
- To collaborate and work with other staff within the department, at Imperial College London and across the National Wind Tunnel Facility network.
- To write reports, conference and journal papers on the outcomes and make presentations on the work to relevant industrial research groups and at appropriate seminars/workshops/conferences etc.

- To engage in training programmes in the University (e.g., through Staff Development) and elsewhere as required.
- To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Points To Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff have a duty and commitment to observing the University's Equality, Diversity and Inclusion policy and procedures at all times. Duties must be carried out in accordance with relevant Equality, Diversity and Inclusion legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity, Information Security and, where appropriate, Recruitment and Selection.

There will be a requirement to undertake further training relevant to the role, both in laboratory techniques and specific Health and Safety related areas.

The post holder may be required to work outside of normal office hours if necessitated by the exigencies of the service.

Organisational Responsibility

Reports to: Principal Investigator, LU EPSRC NWTF Network Grant

Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

1 – Application: 2 – Test/Assessment Centre/Presentation: 3 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Recent relevant experience in an Academic or Industrial research environment.	1,3
	Undertaken measurements in a wind tunnel facility.	1,3
	Processing of experimental data.	1,3
Skills and abilities	Ability to work independently and as part of a team.	1,2,3
	Good communication skills.	1,2,3
	Ability to write project reports and to make technical presentations to industrial and academic research groups.	1,2,3
	Extensive knowledge of relevant techniques and methodologies.	1,2,3
	Proven organisational skills and ability to work flexibly and independently.	1,3
	Proven communication skills and ability to interact effectively with trainees, students and staff.	1,3
	Proactive and able to work under own initiative with the ability to prioritise workload to meet objectives.	1,3
	High level of I.T. skills including knowledge of CAD, programming and scripting.	1,3
	A willingness and ability to undertake further training, as appropriate and to adopt new procedures as and when required.	1,3
Training	Demonstrate evidence of continuing professional development relevant to the role.	1,3
	Good honours Degree in a related discipline or significant equivalent experience.	1,3
Qualifications	Commitment to observing the University's Equality, Diversity & Inclusion policies.	1,3
	Willingness to travel.	1,3
	Commitment to observing Health and Safety regulations at all times.	1,3
	An understanding of UKRI Open Access requirements.	1,3

Desirable Criteria

Area	Criteria	Stage
Skills and abilities	Familiarity with python, Tecplot and web page creation.	1,2,3
	Familiarity with a wide variety of aerodynamic applications ranging from sports aerodynamics through to hypersonics.	1,3
Qualifications	PhD or equivalent experience in experimental or computational aerodynamics	1,3
Experience	Experience of processing aerodynamics/fluid mechanics experimental datasets.	1,3

Conditions of Service

The position is full time and fixed term until 31 March 2026. salary will be on a Specialist and Supporting Grade 6, (£32,348 – £42,155 per annum) at a starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Academic and Related staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html>

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see <http://www.lboro.ac.uk/services/hr/athena-swan/>