

# **Candidate Information**

Position:	Research Fellow, Hydrogen Supply Chain Analysis
School/Department:	Mechanical & Manufacturing Engineering
Reference:	23/111515
Closing Date:	Thursday 25 January 2024
Salary:	£37,841 per annum
Anticipated Interview Date:	Thursday 29 February 2024
Duration:	Fixed Term available until 30/11/2024

### JOB PURPOSE:

To conduct research in the field of hydrogen supply chain analysis at the Wright Technology and Research Centre (W-Tech) at Queen's University Belfast. As part of the Centre, the researcher will support ongoing research activity in a largescale Advanced Propulsion Centre funded research programme, aimed at exploring approaches to the modelling of the hydrogen supply chain suitable for adoption in the bus sector. The researcher will work in an industry-academic blended team developing methods suitable for rapid adoption into industry and being part of the transition to net-zero in city centres across the UK.

#### **MAJOR DUTIES:**

- 1. Development of hydrogen supply chain modelling approaches suitable for adoption within the bus sector.
- 2. To collaborate across an industrial to develop, test and deploy new modelling approaches within industrial test cases.
- 3. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 4. Lead on, or contribute to, decision-relevant outputs and activities, including articles in leading journals, briefing papers, reports, presentations, workshops and public events.
- 5. To support the supervision of PGR students and other research staff within the W-Tech Centre.
- 6. May contribute to introductory courses, for example, on the use of research methods and equipment.
- 7. Carry out undergraduate supervision/demonstrating/teaching duties under direction.
- 8. Carry out routine administrative duties as requested, e.g. arranging research group meetings.
- 9. Read and critically evaluate academic papers, journals and textbooks to keep abreast of developments.
- 10. Attend relevant conferences, seminars or training days.
- 11. Carry out any other duties designated by a line manager and which fall within the general remit of the post, including promoting cohesion within the project team and contribution to coordination of research activities across all its work packages and researchers.

#### **ESSENTIAL CRITERIA:**

- 1. Have, or are about to obtain, a PhD in Automotive, Mechanical, Chemical, Civil, Manufacturing, Aerospace, Electronics, Physics, Applied Mathematics or a related discipline.
- 2. For those applicants about to obtain a PhD, they must have submitted their intention to submit prior to the application deadline.
- 3. Have obtained a first or upper second degree or equivalent.
- 4. Relevant research experience in supply chain, chain analysis, hydrogen production technologies, or a closely related field.
- 5. Demonstrate an ability to manage your own research and to plan research activities effectively.
- 6. Excellent verbal and written communication skills.
- 7. Demonstrate experience of communicating with, developing and maintaining academic and/or industrial relationships.
- 8. Must be willing to work flexibility and travel to partner sites and testing sites across the UK as necessary.

## DESIRABLE CRITERIA:

- 1. Experience with modelling tools such as Aspen Plus or similar.
- 2. Experience with Matlab, VBA or other high level applications.

- 3. Experience of working in an automotive environment.
- 4. Current drivers licence and access to personal transportation.