

Job Description

Role: Lecturer in Safety of Hydrogen-Powered Vehicles Ref: J09/108

Reports to: Head of School of the Built Environment

Responsible to: Head of School of the Built Environment

Job Purpose

To make an academic contribution to the further consolidation of the University's leading position in the emerging market of education/training in the area of safety of hydrogen and fuel cell (HFC) technologies, particularly hydrogen-powered vehicles – the largest fraction of the HFC applications market, and to establish experimental research within the HySAFER Centre to expand and strengthen Ulster's world leading position in hydrogen safety education and research.

Main Duties

1. To establish innovative teaching and learning activities associated with safety issues of hydrogen-fuelled vehicles, including development and teaching of a new 30 CATS points module on hydrogen and fuel cell vehicles safety.
2. To contribute to teaching of the existing courses, e.g. MSc Hydrogen Safety Engineering course, and to the development of new relevant undergraduate, e.g. BSc in Explosion and Fire Safety, BSc in Emergency Planning and Disaster Management, and postgraduate courses, e.g. MSc by Research in Computational Hydrogen Safety, in the School of the Built Environment.
3. To carry out leading edge research on safety of hydrogen-fuelled vehicles or associated area using contemporary experimental methods and other techniques such as computational fluid dynamics.
4. To publish research findings in high quality peer-reviewed journals in preparation for the REF and subsequent exercises.
5. To attract external research income from prestigious sources including research councils.
6. To make significant contribution to the development of national and international research collaborations. To contribute to organisation of international short course series "Progress in Hydrogen Safety", etc.
7. To collaborate with and complement existing research in the HySAFER Centre and the Built Environment Research Institute.
9. To undertake any other duties and responsibilities consistent with the nature and grade of the post.

Applicants shortlisted for interview will be required to give a presentation.