Hydrogen Production Goes ‘Greener’ in DCU

DCU is delighted to announce details of an exciting new research project for ‘greener’ hydrogen production. This Enterprise Ireland funded project aims to demonstrate the production of hydrogen via a novel system for electrolysis of water as a commercially viable and cleaner alternative to the current industrial hydrogen production methods.

There is a considerable demand for hydrogen as it is widely used in the chemical and petroleum industries with ~60% of current supply used to produce ammonia which is then used in fertiliser production. Hydrogen also offers huge potential in the sustainable energy supply chain, both as a clean, viable source of fuel for the expanding transport sector and as a medium to store energy generated from both primary and renewable sources.

This project will build on recent accomplishments in identifying highly catalytic, low cost, materials that can efficiently produce hydrogen at ambient temperature and low voltage.

The project, led by Prof. Han Vos and Prof. Robert Forster aims in the first phase to develop a “proof of concept” system, from that a scalable prototype reactor will be produced which will demonstrate optimised efficiency and a viable operating cost model with the potential to be scaled to produce hydrogen in volumes useful for real world applications.

For more information, please contact Carolyn.Hughes@dcu.ie