Energy Futures Bulletin





Welcome to the first edition of the Energy Futures Bulletin (EFB) where you can get an insight into the energy-focused research and innovation going on at Northumbria University. Energy Futures is a diverse and inclusive community of >50 academics working towards a more sustainable future powered by research impact. In particular, we have capabilities including expertise and laboratories in the following areas:

- Advanced Manufacturing
- Photovoltaics
- Thin Films & Coatings
- Batteries & Fuel Cells
- Sustainable Fuels & Heat
- Sustainable Design

GRANT SUCCESS

Solution Processed Inorganic Thin-Film PV Devices

Dr Devendra Tiwari and colleagues in the Northumbria University Photovoltaics (NUPV) research group have received significant funding to work with the universities of Bristol and Loughborough to create a new technology that will allow solar panels to be integrated into windows and other infrastructure to allow urban areas to generate their own clean and renewable energy. You can read the press release about the work here.



3D Nanophotonics in Artificially Structured Materials Dr Daniel Ho has secured a £373k EPSRC New Investigator Award (NIA) to investigate the physics behind butterfly wings and apply this to 3D structures that can effectively trap and control light.

EPSRC CDT in ReNU

Quantum & Molecular Photonics

 Electrical Power Engineering Materials Characterisation

The EPSRC Centre for Doctoral Training in Renewable Energy Northeast University (ReNU) is a £5.5M UKRI investment to train the next generation of innovators in clean energy. It is led by Northumbria University with Durham and Newcastle universities as partners and includes over 30 external partners. Here are some recent key updates:

- Joint international workshop on CO₂ reduction with the CREATE MEE² graduate programme at the University of Calgary. (24/03/2021)
- Bespoke business and innovation training including a mini-MBA for doctoral candidates at Durham University. (15/03/2021)
- Award of ReNU's second UKRI UK-Canada Globalink doctoral student exchange scholarship. (03/09/2020)

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Physical Sciences Research Council

NORTH EAST LOCAL ENTERPRISE PARTNERSHIP

Northumbria University is a member of the North East Energy Catalyst group founded by the North East LEP.

Energy Futures has helped the Catalyst to inform funding calls for regional SMEs focused on (1) decentralised and decarbonised energy; (2) data and digital-led solutions; and (3) materials for sustainable energy.

Northumbria University has also been awarded funding for new R&D in inkjet materials printing and optical curing.



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