ORC researcher awarded IOP Doctoral Research Prize

Research fellow, Dr Jun-Yu Ou, at the University of Southampton, has won the IOP's 2015 QEP (Quantum Electronics and Photonics) Doctoral Research Prize for his work on ‘Reconfigurable Photonic Metamaterials.’

Under the supervision of Professor Nikolay Zheludev and Dr Eric Plum at the Optoelectronics Research Centre and Centre for Photonic Metamaterials at the University, Bruce has been is recognised for his experimental research that has established a new research direction of growing international importance: Reconfigurable photonic metamaterials.

Dr Eric Plum explains: "By bringing together advanced nanofabrication, nano-mechanics and photonics, Jun Yu has demonstrated the first practical solutions for dynamic control of metamaterial optical properties with high contrast and speed using electrical signals, thermal inputs and even light itself – a true technological breakthrough."

Jun-Yu's research has been published in 24 journal articles (including Nature Nanotechnology, Nano Letters, Advanced Materials, Physical Review Letters), In particular, Jun Yu's industry background, as a focused ion beam / scanning electron microscope specialist, has enabled him to become a leader in reconfigurable photonic metamaterials with an informed direction to his research into industrially relevant areas offering commercial opportunities.

Jun-Yu's work has led to three patent applications and he has recently been awarded an EPSRC Doctoral Prize Fellowship to pursue further his pioneering work in Southampton on photonic metamaterials providing ‘optical properties on demand’. His work is at the heart of a new £5M EPSRC programme grant.

Find out more about Dr Jun-Yu Ou's work.