

Education:

2015 - Present, PhD Student with TEMUL

"Interfacing of graphene with functional materials for novel optoelectronics devices, studied via advanced electron microscopy"

Undergraduate: First class honours BSc in Applied Physics, University of Limerick, Ireland

Publications:

"Strain-induced phonon shifts in tungsten disulfide nanoplatelets and nanotubes" - F. Wang, I. A. Kinloch, D. Wolverson, R. Tenne, A. Zak, E. O'Connell, U. Bangert, and R. J. Young, 2D Mater. 4, (2016)

"Ion-beam modification of 2-D materials - single implant atom analysis via annular dark-field electron microscopy" - U. Bangert, A. Stewart, E. O'Connell, E. Courtney, Q. Ramasse, D. Kepatsoglou, H. Hofsäss, J. Amani, J.-S. Tu, and B. Kardynal, Ultramicroscopy (2016)

Workshops:

International School on Fundamental Crystallography with applications to Electron Crystallography, University of Antwerp, Belgium

Quantitative Electron Microscopy (QEM) School 2017, Montpellier, France

Conferences:

Microscopy Society of Ireland (MSI) 2015, University of Limerick, Ireland - Member of local organising committee

Institute of Physics 2016 Spring Meet, Belfast, Ireland - Poster: "Investigating transition metal dichalcogenide nanostructures via high resolution electron microscopy"

Microscopy Society of Ireland (MSI) 2016, Dublin Institute of Technology, Ireland - Winner of best poster in Material Science, "Ion implantation into two-dimensional materials for electronic tailoring – observing the behaviour of individual implants"

Graphene Week 2016, University of Warsaw, Poland - Poster presentation, "Ion implantation into two-dimensional materials for electronic tailoring – observing the behaviour of individual implants"

Bernal research Day, University of Limerick, Ireland - Oral Presentation "Making the wonder materials useful"

European Microscopy Congress (EMC) 2016, Lyon - Oral presentation, "Ion implantation into two-dimensional materials for electronic tailoring – observing the behaviour of individual implants";
Poster Presentation, "Seeing nanostructures from a new angle – tomography in a transmission electron microscope"

Institute of Physics 2017 Spring Meet, Dublin, Ireland - Poster: "Shooting Mo"

Microscience and Microscopy Congress (MMC) 2017, United Kingdom - Oral Presentation, "Low energy ion implantation into 2D materials - Observing the behaviour of individual implants"