



Name: Catherine Kelly

Degree	Awarding Institution	Topic/title
Master of Engineering	Queen's University, Belfast	Chemical Engineering
PhD	Queen's University, Belfast (School of Pharmacy)	Application of supercritical fluid technology to the pre-formulation and production of amorphous solid dispersions

Current research:

- Novel technologies and optimised formulations for delivery of solid dispersions of BCS Class II drugs
- Advanced thermal analysis of pharmaceuticals for the determination of amorphicity and the presence of polymorphism
 - Raman spectroscopy as a PAT tool for continuous pharmaceutical manufacturing.
 - Spray drying and hot melt extrusion as continuous manufacturing tools.

Position	Company/institution	Key responsibilities
PDRA	University of Limerick	<ul style="list-style-type: none"> - Training of PhD students and PDRA's in all aspects of thermal and spectroscopic analysis. - Main contact for SSPC project T8 within UL.

Research expertise keywords: Thermal analysis, Raman spectroscopy, amorphous solid dispersions, polymorphism, continuous manufacturing, dissolution studies, contact angle & wetting of powders, hot melt extrusion, spray drying.

Existing industry interaction to date - any secondments, placements, project work, etc.

One year spent on a student placement in Almac, a contract pharmaceutical company in Co. Armagh.

Additional information/hobbies/interests/expertise: Irish traditional musician and wedding harpist.

Synthesis & Solid State Pharmaceutical Centre, Materials & Surface Science Institute (MSSI),
University of Limerick, Ireland
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