



PostDoc Job Opportunity



DUBLIN CITY UNIVERSITY	First Name	Last Name	email	Institute	Address
PI name & contact details:	Dermot	Brougham	Dermot.brougham@dcu.ie	DUBLIN CITY UNIVERSITY	Glasnevin, Dublin 9, Ireland.
School:	Chemical Sciences				
Research Centre/ group affiliation:	National Institute for Cellular Biology				
Research group/ centre website:					

Brief summary of research group/centre activity:

Our research is on NMR spectroscopy applied to studying dynamic processes in the solid and liquid state. We perform temperature- and magnetic field-dependent NMR measurements to study interesting exchange and dynamic. Current projects include; novel magnetic nanoparticles for MRI/drug delivery and controlled assembly of nanoparticles into hierarchical clusters.

Description of postdoctoral project on offer:

Development of CP-MAS, HR-MAS and HR-MAS-DOSY measurements to characterise adsorbed species on nanoparticle surfaces and study dynamics of these molecules. These physical parameters are critical to developing understanding of the interaction of low molecular mass species and solutes with magnetic nanoparticles and nanoparticle assemblies in suspension. That knowledge will be used to develop next-generation nanoparticulate contrast agents for MRI and multi-modal imaging.

Please indicate the core skills or disciplines that are required for this position:

NMR analysis, spectroscopy