

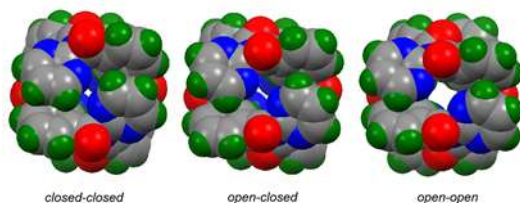
DUBLIN CITY UNIVERSITY	First Name	Last Name	email	Institute	Address
PI name & contact details:	John F	Gallagher	John.gallagher@dcu.ie	DUBLIN CITY UNIVERSITY	Glasnevin, Dublin 9, Ireland.
School:	Chemical Sciences				
Research Centre/ group affiliation:	Synthesis and Structural Sciences				
Research group/ centre website:	http://www.dcu.ie http://doras.dcu.ie/view/people/Gallagher,_John_F=2E.html http://www.youtube.com/channel/UC9FOUhx_uqnI9uyObrcnmUQ/videos				

Brief summary of research group/ centre activity:

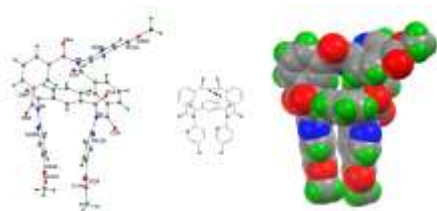
Research is summarized as follows: Supramolecular and Macrocyclic (Trezimides/Tennimides) chemistry using amide/imide linkers (foldamers, oligomers and polymers); Synthesis, structural systematics (nxm isomer grids) and conformational analyses of benzamides and carboxamides; Polymorphism in pharmaceuticals; Organometallics in biological chemistry and materials science.

Description of postdoctoral project on offer:

Our discovery of a general route into imide-based macrocycles as trezimides and tennimides provides a scaffold for the generation of a diverse range of macrocycles. The trezimides and tennimides will be explored with special interest in (i) varying the heteroaromatic ring functionality, (ii) understanding the nature of the imide hinge, (iii) developing metallo-derivatives for materials science and catalysis and (iv) applications in (bio)analytical science. See our recent paper in the Journal of Organic Chemistry: Pavle Mocijac and John F. Gallagher, 2013, Journal of Organic Chemistry, 78, 2355-2361



Trezimide and Tennimide structures above; Ester derivatives below



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

Skillssets for postdoctoral research: Synthetic organic and inorganic chemistry expertise. Spectroscopy and especially ¹H, ¹³C, ¹⁹F NMR, IR, UV-Vis knowledge. Chromatography and separations science experience. Report and paper writing for International chemistry journals.