



School News February 2023

Welcome to....

A warm welcome to Dr Patricia Fleming (Trish), who joins the technical team to support the NMR service from tomorrow morning. Trish has a number of years' experience supporting NMR activities in industry, and she will be delighted to support the activities of researchers in the School. Please drop in and say hello to her over the coming weeks.

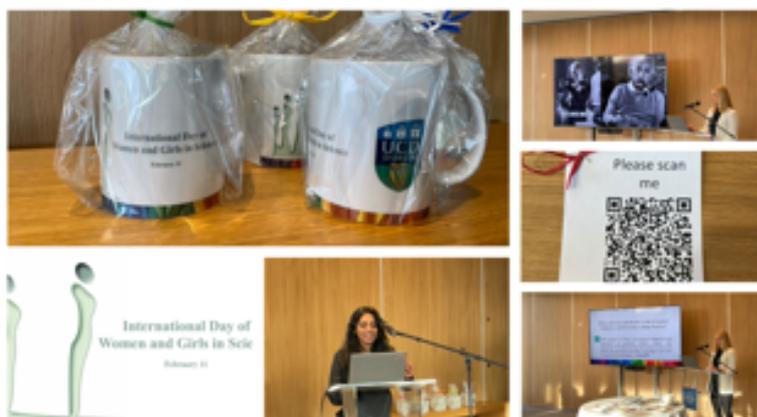
The Quinn group welcomes Zengchun Xie to the group as a postdoc on the TRACER Project – (TaRgeted gold (Au) nanocomposites as Cancer radiosensitisERs) funded by the HEA North South All Island initiative.

School Events & Activities

International Day of Women and Girls in Science was celebrated with a breakfast event in the University Club on February 8th, organised by the postdocs from the EDI committees in the School of Chemistry and School of Maths and Stats. The event was jointly supported by the two Schools and by funding from a recent EDI Accelerator Award from UCD.

The breakfast included a role model awards ceremony for nine female role models, nominated by graduate students and postdocs from our two schools.

Congratulations to all the role model awardees and to the organisers – it was a really super event!





Role Model awardees from the School of Chemistry: Prof Susan Quinn; Dr Gita Singh; Kathryn Yeow; Katie McGarry; Ioanna Bampouri; Olivia Breen

The role model awardees from the School of Maths and Stats: Prof Claire Gormley; Dr Áine Byrne; Tiziana Comito



School of Chemistry Role Model Awardees

March 8th is [International Women's Day](#) and our School will mark this occasion with a celebratory event on March 31st in the UCD Cinema (save the date!!), organised by the Postdocs, with support from the EDI committee.

It is also worth listening to a wonderful podcast documentary on Newstalk, '[Ground breakers – Dervilla Donnelly](#)'. Dervilla Donnelly is Emeritus Professor of Organic Chemistry at UCD, and played a significant role in Ireland's scientific success with her

own research. Additionally, Dervilla was a prominent female Professor at a time when there were few female academics.

A portrait of Dervilla to be hung in the School will be unveiled at our March 31st event. Additionally, if you haven't already seen the short videos of some of our current 'Inspiring Women' in Chemistry, please take a look on the [EDI section](#) of our School's website.



Emeritus Professor Dervilla Donnelly.

The postgraduate students from the EPSRC/SFI CDT in Sustainable Chemistry, as well as some associated staff, attended the Winter Showcase held at the University of Nottingham on the 6-7 Feb. Congratulations to all the students who gave excellent research talks and presented their work on posters, and to those who picked up prizes for their presentations.

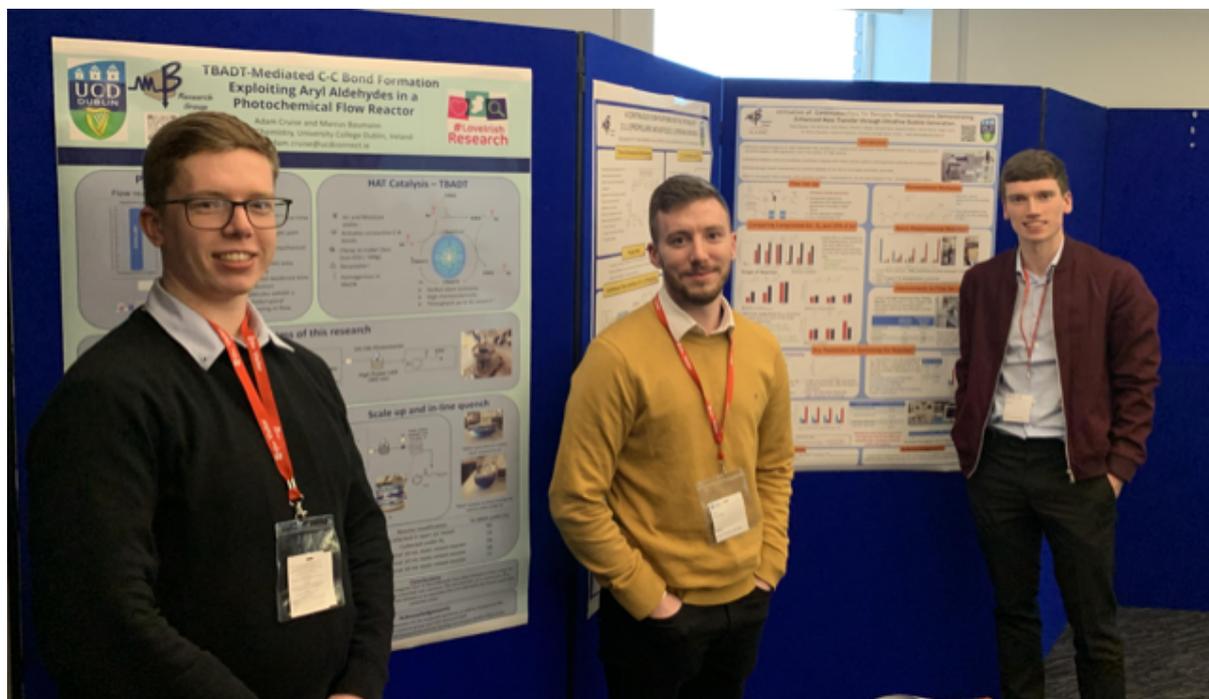




Congratulations to Grace Morgan, who gave an invited lecture at the 36th Workshop on Novel Materials and Superconductors organised by the Technical University of Vienna, where she discussed recent results from the group on formation of mobile domain walls in spin switchable compounds.

Congratulations to Declan Gilheany, who recently gave his fantastic Eva Philbin lecture in Galway. The lecture, which was part of the Eva Philbin Public Series associated with Declan's ICI award, was described by a UCD academic as a 'magnificent tour de force'.

Adam Cruise, Kian Donnelly and Ruairi Bannon pictured in front of their posters presented at the recent *Flow Knowledge Day* at Pfizer Ringaskiddy, which was jointly organised by SSPC, Anita Maguire (UCC) and Marcus Baumann (UCD).



Awards and Recognition

Congratulations to Marina Rubini who has joined the RSC Peptide and Protein Science Group Committee as the Ireland representative.

School Website Updates

Please take a look at the fantastic new content on the X-Ray Diffraction Laboratory page, and well done to Julia for producing this.

<https://www.ucd.ie/chem/about/ourfacilities/coretechnologies/x-raydiffractionlaboratory/>

On this page, you will find free downloads for structural resolution programs, Crystallography Open Database (also free), the International Union of Crystallography, which publishes news about conferences and meetings, and an MIT tutorial on crystallization process. Students, and anybody else interested in learning about crystallography may find this information interesting.

Thanks to our administrative team Deirdre, Elaine and Susan for their help with updating the website.

New Doctor in the House

Congratulations to David Ferris from the Redmond Group on passing his viva on the 8th Feb.

Recent Publications from the School

Congratulations to David and co-workers from the Quinn group for publishing their work in *Materials Advances*. 'Microsphere-Supported Gold Nanoparticles for SERS detection of Malachite' Green, David T. Hinds, Samir A. Belhout, Paula E. Colavita, Andrew D. Ward, Susan J. Quinn, [Materials Advances 2023](#).

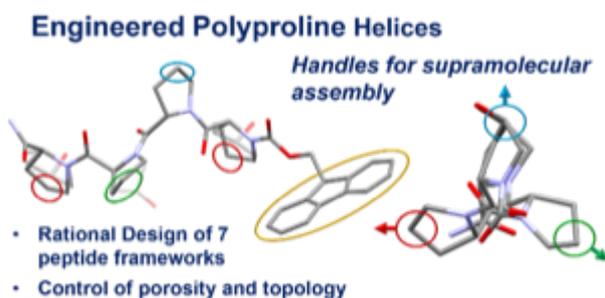
Conor Kelly from the Morgan group had his first corresponding author paper published in *Crystal Growth and Design*, where he reported the outcomes of his work in using variable temperature diffraction to detect spin state in Fe³⁺ complexes and his investigations of the differences in spin state choices in the solid state and solution. Conor T. Kelly, Michael Griffin, Kane Esien, Solveig Felton, Helge Müller-Bunz, and Grace G. Morgan, [Cryst. Growth Des. 2022, 22, 11, 6429–6439](#)

A recent collaboration by the Baumann and Bornscheuer groups has been published in *Angewandte Chemie*, highlighting a new biocatalysed strategy to degrade chemically modified polymers such as PVA. The patented approach is currently being licensed by a US-based food manufacturer that plans to apply this for packaging products in view of their biodegradation. Congratulations to all the UCD authors! 'Synthesis of Modified Poly(vinyl Alcohol)s and Their Degradation Using an Enzymatic Cascade.' Gerlis von Haugwitz, Kian Donnelly, [Mara Di Filippo](#), [Daniel Breite](#), [Max Phippard](#), [Agnes Schulze](#), [Ren Wei](#), [Marcus Baumann](#), [Uwe T. Bornscheuer](#) [Angew. Chem. Int. Ed. 2023, e202216962](#).

Congratulations to Kathryn Yeow from the O'Reilly group who contributed towards [Modern Developments in Catalysis](#) (Volume 2) with a chapter on '[Modern Developments in Biocatalysis](#)'. Scarlet A. Ferrinho, Samuel A. Molyneux, Rebecca J. M. Goss, Elizabeth L. Bell, Amy Crossley, Anthony P. Green, [Kathryn Yeow](#), and [Elaine O'Reilly](#). The chapter was jointly written with the groups of Professor Rebecca Goss at St. Andrews and Professor Anthony Green at Manchester. Well done Kathryn!

Congratulations to Zoe Beato, Cillian O'Beirne and co-workers, for publishing their work in [Antibiotics, 2023, 12, 348](#). This collaborative work was with colleagues in the department of Biology in Maynooth University.

Congratulations to Aniello Palma and co-workers for publishing their work 'Supramolecular Self-assembly of Engineered Polyproline Helices' as a preprint in [Chemrxiv](#). In this investigation, the team use oligoproline helices as supramolecular building block, allowing predictable tuning of supramolecular interactions to engineer the formation of supramolecular peptide frameworks with varying properties. Graphic below.



Congratulations to Kristy Stanley, Sean Kelly and James Sullivan on publishing their work in Applied Catalysis B: Environmental. “Effect of Ni NP morphology on catalyst performance in non-thermal plasma-assisted dry reforming of methane”, [Applied Catalysis B: Environmental, 2023, 328, 122533](#).

Save the Date!

March 31st: An event to mark International Women’s Day “Not Just the 8th of March 2.0” will take place in the UCD cinema on March 31st. More information will follow soon.

March 22nd: STEM Research Day for Academic staff, will take place on March 22nd in the UCD Village. [Registration](#) for this event is essential.

April 27th: ChemSoc’s Inaugural Lecture will take place on April 27th from 2-5pm.

May 16th: School of Chemistry Research Day in H2.40 Science Hub. Including talks from new academic staff in the School followed by lunch. All staff in the School are welcome to attend. Please save the date.