

School of Chemistry News December 2023







Welcome to...

The School is delighted to welcome back Dr Bartosz Bieszczad, who was the recipient of an SFI-IRC Pathway programme. Bartosz also did his PhD in the School and we wish him every success in his independent research.

Farewell to ...

The Baumann group bid farewell to Dr Jorge Garcia-Lacuna and thank him for all his hard work over the last 2 years. Best wishes from all the group and good luck in your next career steps!

Movember

Well done to the Movember team, who raised a whopping €1,947!! Fantastic effort folks!



Chemistry Tag Team Success (again!)

The Chemistry Tag team has won another cup! It's becoming a habit!! Well done team – you are amazing. Anyone interested in joining the team can email <u>david.mc-laughlin@ucdconnect.ie</u>. They would be delighted to have some new team members.



Awards and Recognition

Graduations

UCD School of Chemistry is delighted to congratulate a large group of twenty-five graduate students who were conferred with their degrees at this year's December Conferring ceremony on Tuesday the 5th of December 2023. Ten PhD students and two MSc by Research students were conferred alongside thirteen Taught MSc students in a day of celebration of all of their achievements.

Well done to our Taught MSc graduates in Synthetic Chemistry for the Pharmaceutical & Fine Chemical Industry: Somya Chawla, Luke Crehan, Clara Dornan, Oliver Dowling, Niall McDonnell, Aoife O'Donnell. Jeremiah Olusegun, Rachel Sze Huey Tan; and to our MSc graduates in Chemistry by Negotiated Learning: Mohammad Arsalan Pasha, Shrikala Santosh Bandekar, Wanyujin Wang, Jia Min Wong, Xiangxing Xu.

The <u>Graduate Research</u> cohort comprised two <u>MScs by Research</u> and ten PhD students. As always, their thesis titles demonstrate the wide breadth of research that our Graduate Research students undertake.

Zoe Walsh MSc, supervised by Susan Quinn & Jeremy Simpson, for her thesis entitled "Study of the Biological Interactions on Luminescent Carbon Dots."

Ines Martinez Chauvin, MSc, supervised by Dermot Brougham, for her thesis entitled "Synthesis and process optimisation of multicore iron-oxide nanoparticles as responsive components in biomedical applications."

Mark Dizon PhD, supervised by Vitaly Buckin, for his thesis entitled "Application of high-resolution ultrasonic spectroscopy for real-time non-destructive monitoring of hydrolysis of whey proteins."

Kian Donnelly PhD, supervised by Marcus Baumann, for his thesis entitled "Utilising Continuous Flow Technology for the Synthesis of Strained Cyclic Systems."

Cian Reid PhD, supervised by Patrick Guiry, for his thesis entitled "The Synthesis of Chiral P,N Ligands and Their Applications in Asymmetric Catalysis".

Dorottya Krizsan PhD, supervised by Susan Quinn, for her thesis entitled "Towards Dual Emissive DNA-Binding Probes: Preparation, Characterisation and Functionalism of Luminescent Carbon Dots."

Peter McDermott PhD, supervised by Eoghan McGarrigle, for his thesis entitled "Novel Strategies for the Synthesis of Organophosphorus Compounds."

Cormac Bracken PhD, supervised by Marcus Baumann, for his thesis entitled "Applying Photoflow Chemistry to Generate Diverse Heterocycles from Reactive Intermediaries."

Lucy Byrne PhD, supervised by Patrick Guiry, for her thesis entitled "Towards the Synthesis of Lipoxin-Resolvin Hybrid Analogues for Potential Therapeutic Applications."

Danielle Winning PhD, supervised by Dermot Brougham, for her thesis entitled "Magnetic Nanocomposite Hydrogels with AC-field Induced Release as Controlled Delivery Systems for Biomedicine."

Benjamin Owen PhD, supervised by Patrick Guiry, for his thesis entitled "The Synthesis of Bicyclo[1.1.1]pentane-Containing Aromatic Lipoxin Analogues."

Francesca Giulia Nacca PhD, supervised by Andrew Phillips, for her thesis entitled "Synthesis and Evaluation of a Functionalised Set of Highly Lewis Acidic Eta-6-Arene Ru(II) Alpha, Alpha-Diimine Catalysts to Efficient Promote Benchmarked Diels-Alder Cycloadditions".



The Graduates.



Several chemistry faculty joined the academic procession at graduations on December 5th, pictured here with President Orla Feely.





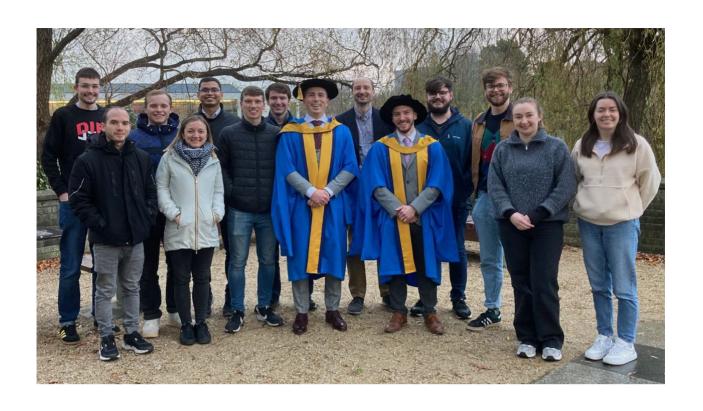


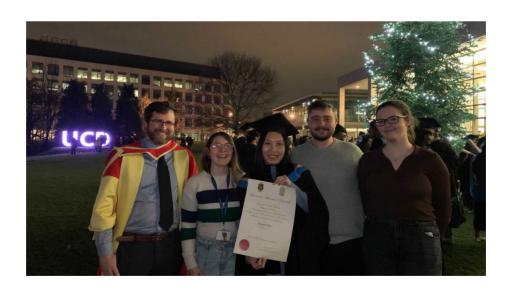






A selection of happy graduates and proud supervisors.





Congratulations to Wanyujin Wang for graduating with her Taught MSc degree. Wanyujin did her project in the Byrne Group and has returned as a Research Assistant, working on an SFI funded project.











Congratulations to Dr Cormac Bracken and Dr Kian Donnelly, who graduated with their PhDs - Congratulations from the entire Baumann group!

New Governing Authority Member

Congratulations to Jimmy Muldoon, who was elected to the <u>Governing Authority</u>. The Governing Authority is responsible for ensuring the University maintains internal systems of good governance that enable accountability, transparency and object decision making.

New Doctors in the House

Many congratulations to Krutika Singh, Lucy Byrne, & Karl Griffin on passing their PhD Vivas.

Recent Publications from the School

Well done Cormac for your latest paper recently published in Organic Letters! "Synthesis of Highly Reactive Ketenimines via Photochemical Rearrangement of Isoxazoles." Cormac Bracken and Marcus Baumann *Org. Lett.*, **2023**, *25*, 6593–6597

DOI: 10.1021/acs.orglett.3c02556 <u>Synthesis of Highly Reactive Ketenimines via</u> Photochemical Rearrangement of Isoxazoles | Organic Letters (acs.org)

Congratulations to Dairine and Cian from the Guiry group, who had their research published in JOC: https://pubs.acs.org/doi/full/10.1021/acs.joc.3c01944

Events and Activities

This year's recipient of the Science Alumni award was Dr Margaret Faul, BSc 1986 (Chemistry), MSc 1988 (Chemistry).



Dr Margaret Faul (4th from left) and the other 2023 UCD Alumni Award winners.

Dr Margaret Faul is recognised internationally as a leader in the pharmaceutical industry and a strong advocate for women in chemistry. Throughout her 25-year career at Amgen, California she has commercialised innovative medicines to treat patients with serious illness, focusing on the process development and supply of drugs for clinical trials and the commercial market.

Prior to her current role as Vice President of Manufacturing and Clinical Supply and Operations Site Head, she advanced the company's sustainability culture in evolving a green chemistry culture focused on the implementation of more sustainable chemical processes as the firm's Vice President of Drug Product Technologies.

Margaret has been a member of the editorial boards for Science of Synthesis, Organic Synthesis, Journal of Organic Chemistry and Organic and Biomolecular Chemistry and her scientific excellence is demonstrated through more than 100 scientific publications and eleven patents.

In addition to the recent Alumni Awards, a half day symposium titled Highlighting Organic Chemistry at UCD was organised by Prof Pat Guiry in honour of Dr Margaret Faul. Academics from across the school delivered talks throughout the day which culminated in Margaret's lecture titled "Innovation in the Development of Novel Therapeutics."



Dr Margaret Faul and other members of the class of 1986

Dr Faul was presented with a piece of Dublin Crystal to celebrate her contribution to science and support towards early-stage career female scientists. Over 70 students and staff attended the event, including fellow classmates from the graduating class of Chemistry 1986 and 1988. Following the event, a reception was held.

CSCB Symposium

The CSCB Symposium, organised by Pat Guiry, was held in the UCD Village on December 8th. Professor Jonathan Clayden (University of Bristol), Professor Clotilde Policar (Ecole Normale Supérieure-PSL, France), Professor Stefan Oscarson (UCD), Professor Edward Anderson (Oxford), Professor Dale Boger (Scripps) gave fantastic lectures, and the audience were also treated to wonderful short talks from PhD students and postdocs from UCD, RCSI, TCD, DCU, QUB, and UCC. Below are some pictures of the speakers and prize winners.

Well done to Ruairi, Ilenia, and Jorge for presenting posters at the Symposium and to Jorge who also delivered one of the Early Career Researcher talks.

Well done to Kathryn Yeow (O'Reilly group) for winning a poster prize. Congratulations to Dairine (Guiry group) who presented her work in the Early Career Researcher session and Declan won one of the poster prizes.























CSCB Symposium prizegiving

Other celebrations

Well done to Ram and Smit from the Elghobashi-Meinhardt group, who completed their first RSP meetings successfully and had productive discussions. Full steam ahead! Below is a photo of Ram and Smit with Nadia, taken after the meetings.



Many groups got together for Christmas celebrations in December, here are a selection:



(Most of) The O'Reilly group enjoying delicious Chinese food.







The Byrne, Hooper and Phillips labs teamed up to celebrate Christmas, joining together for secret Santa and dinner in El Grito.

Irish Biological Inorganic Chemistry Symposium in UCD for first time.

The 7th Irish Biological Inorganic Chemistry Symposium was hosted at UCD Village on 15 December, hosting 90 delegates, from around Ireland and beyond. International plenary lectures were given by Prof Ramon Volar (imperial College London) and Prof Petra Heffeter (Medical University of Vienna), with invited talks from Prof. Mathias Senge (TCD) and Prof Denise Rooney (MU). The SLS prize for best poster was awarded to Eleanor Windle (UCD), best flash presentation to Joshua Thorogood (TCD) and best oral presentation to Ella O'Sullivan (TUD). The organising committee of IBICS-7 were Joe Byrne, Susan Quinn, Andrew Phillips, and Sophie Kavanagh.







Photos (from top): IBICS-7 local organising committee. IBICS national committee members. Early career researchers who gave flash presentations. Group photos of attendees.

Hannah, Sophie, and Joe went to the **RSC Macrocyclic and Supramolecular Chemistry** meeting in Birmingham on 18-19 December, where Hannah had a flash presentation and a poster, where she presented research from the SugarCoat North-South Research Programme project.







A reminder that the ECC-9 Call for Abstracts will close in 26 days on Monday, 15 January 2024!

Merry Christmas

Season's Greetings

Happy Holidays



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