UCD SCHOOL OF CHEMISTRY







UCD Equality, Diversity and Inclusion Cultivating a Culture of Respect and Belonging



Silver Athena Swan Award for UCD School of Chemistry

We are delighted to share the wonderful news that on Friday, 12th of September, the UCD School of Chemistry was conferred with an Athena SWAN Silver Award.

Sarah Fink, Head of Athena Swan Ireland, said "this Silver Athena Swan award highlights the fantastic commitment of University College Dublin, School of Chemistry in bringing about change through impactful and sustainable gender equality initiatives in higher education across Ireland. Congratulations to all those who work so hard to achieve and sustain this recognition."

This important award confirms that we are embedding the principles of EDI in the School to shape how we work, learn, and support one another. Many people deserve congratulations for this success. This significant achievement would not have been possible without the dedication, time, and hard work of our EDI Committee and our Athena SWAN Self-Assessment Team. Their commitment to creating a more inclusive and supportive environment has been the driving force behind this success.

We would especially like to acknowledge the outstanding leadership of Elaine O'Reilly, then Chair of the EDI and AS Committee during the Athena SWAN submission. Her vision, persistence, and passion guided us throughout this process, and this award is a reflection of her tireless efforts.

Finally, we extend our best wishes to Kristy Stanley and Serena Cussen as they continue this important work.

Congratulations Athena SWAN Silver Award





FYI - EDI

School of Chemistry EDI/AS Committee

We're delighted to introduce our new EDI Committee.

Chairs:

Kristy Stanley Serena Cussen

Academic Staff:

James Sullivan
Dermot Brougham
Tom Hooper
Fun Man Fung
Nadia Elghobashi-Meinhardt
Evan Spotte-Smith
Leila Negahdar
Elaine O Reilly

Professional Staff:

Patricia Fleming Jimmy Muldoon

Research Staff:

Rosa Fernandez Marianne Harr

PhD Students:

Searena Carroll Pratik Avinash

Thank you to everyone who showed interest in joining our EDI Committee.

All Staff Coffee Morning

On the 9th of September, we held our coffee morning, which provided a wonderful opportunity to reconnect with academic colleagues ahead of the new term. It was a great occasion to catch up before the start of the term.

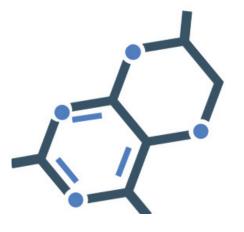






Welcome

Ad Astra Fellowship Programme



We are pleased to welcome three new faculty members, Dr Alexander Jussupow, Dr Evan Spotte-Smith, and Dr Liana Zoumpouli, who joined the School of Chemistry in Ad Astra Fellow / Assistant Professor roles in early September 2025. Read more on our website here



<u>Dr AlexanderJussupow</u> joins us from Michigan State where he was a post-doctoral research fellow. Prior to this he was a PDRA in Stockholm University and before this he completed a PhD in TUM Germany. His research involves the development of computational methods to uncover biomolecular interactions, structural dynamics, and the behavior of complex biological systems. He will integrate experimental and Al-derived data into molecular dynamics simulations, to improve the accuracy and predictive power of simulations. In parallel, he also applies computational approaches to gain deeper insights into largescale biomolecular assemblies, including respiratory supercomplexes and bacterial organelles.



Dr Evan Spotte-Smith was a post-doctoral fellow and a Carnegie Bosch Institute fellow at Carnegie Mellon University and before this they completed MS and PhD degrees at Berkeley. Evan's research will involve combining chemical reaction networks (CRNs), machine learning (ML), high-throughput experimentation, and multi-scale modeling to focus on data-driven algorithms to autonomously explore and explain reactive processes, rational design for energy storage and materials synthesis and also catalytic recycling of waste plastics to value-added chemical products.

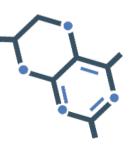


<u>Dr Liana Zoumpouli</u> carried out her primary degree in the Aristotle University of Thessaloniki in Greece and completed an MRes and PhD at the Centre for Sustainable Chemical Technologies in the University of Bath. Subsequently she worked in Cranfield University as a Research Fellow in Wastewater Treatment before returning to the University of Bath to work on a project enhancing selective membranes.

In UCD, Liana's research will involve developing novel materials and processes for the removal of anthropogenic micropollutants, such as persistent pharmaceuticals, from water and wastewater using advanced analytical techniques, materials science, computational modelling, and environmental engineering.

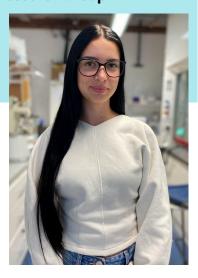


Welcome New Starters



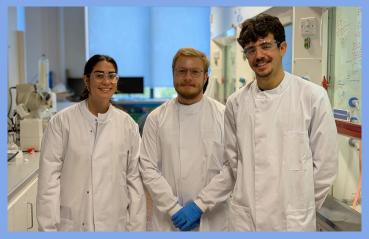
News from the SINFERT Research Group

We welcome Ms Ema Vranic, who started as a research assistant on the SINFERT project on 8th September!



News from the J Byrne Research Group

Joe Byrne's group would like to welcome three new members this Autumn: Dr Rosa Ferndandez Pison joined as a postdoc in August, while Finn Tlatlik and Hubert Rebow started their PhDs in September. We wish them all the best with their projects.



News from the Baumann Research Group

The Baumann group welcomes back Daniel Corcoran and Cathal Kelly who have just started their PhDs in the Baumann group supported by Enterprise Partnership PhD scholarships. We are also welcoming our 4th year project students Harry McGuckin, Brian Managbanag and Kara O'Connor and wish them all the best for their research in the coming months.

News from the Sullivan Research Group

We are delighted to welcome Emilia Kazek and Tim Jahnichen to the group. Emilia began a PhD on the recycling of plastic wastes while Tim will work as a PDRA on photocatalysts for PFAS remediation.

News from the Zhu Research Group

A warm welcome to Joseph Sheerin, who joined Dr Zhu Research Group to start his PhD study on a Sir Walter Hartley Scholarship. Joseph joined us from Trinity College Dublin.

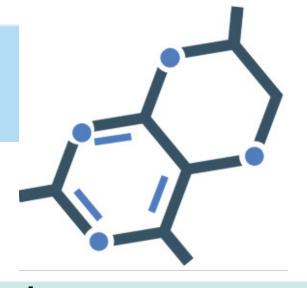
News from the McGarrigle Research Group

The McGarrigle group welcomed back Finn McCaffrey as he starts his PhD in the area of asymmetric catalytic organosulfur chemistry in a new collaboration with the group of Prof. Ona Illa (Universitat Autonoma de Barcelona) which will involve spending time in Barcelona as a researcher also. We also welcome Ruby and Ellen who have started their final year projects in the areas of organocatalysis and natural product synthesis, respectively.

News from the Elghobashi-Meinhardt Research Group

The Elghobashi-Meinhardt group welcomes PhD student Toby Markham! Toby, who is embarking on a joint computational/synthesis project together with the Henthorn group, will be using machine learning to engineer, synthesize, and characterize novel FeS carbide compounds. In addition, we welcome back 3rd year student Hugo Idziak-Matuszczak and 4th year student Callum Kelly. Both will be studying the electronic structure of the nitrogenase cofactor.

Welcome Back



Stage 4 class of 2025/26

We're excited to welcome the BSc Class of 2025/26 back as they begin their Final Year capstone projects across our research groups. Wishing them every success for the year ahead!



We would also like to extend a warm welcome to all our students returning to UCD for the 2025–2026 academic year!

New Doctors in the House

Students passed their VIVA

Congratulations to Francesca Adami (Morgan Research Group) who successfully defended her PhD thesis at her Viva Voce on Wednesday 24th of September. Many thanks to her examination committee and well done Francesca.





September 2025 Conferring of Undergraduate Degrees

Congratulations to the BSc (Hons) Class of 2024/2025 who were conferred with their chemistry degrees on Wednesday, 3rd September 2025. Following the ceremony in O'Reilly Hall and a reception in the O'Brien Centre for Science the newly minted graduates joined academic staff at the Chessboard by the lake for the now traditional school group photograph. You can review the full news on our website here.



Class of 2024/25 with Academic Staff

We are very proud of all of our graduates with their BSc Hons degrees in Chemistry, Medicinal Chemistry & Chemical Biology, Chemistry with Environmental & Sustainable Chemistry and Chemistry & Mathematics Education. You can read more about our undergraduate programmes here.

Everyone at UCD School of Chemistry wishes the best of success in the future to all of our graduates.





Congratulations



September 2025 Conferring of Undergraduate Degrees



L to R: Saman Mutahir, Wesam Alias, Roisin Cellarius, Mickey O'Reilly, and Rosie

We are also delighted to share that some of our new graduates will be continuing their studies at UCD School of Chemistry as PhD students.

Saman Mutahir has joined the School under the supervision of <u>Professor James Sullivan</u>, with co-supervision by <u>Dr Leila Negahdar</u>, while Mickey O'Reilly will be pursuing his PhD under the supervision of Dr Justin Henthorn.

Some photos of Stage 4 students with the academics who supervised their stage 4 projects







Jessica Osypov, Marina Rubini and Emily Kelly



congratulations

UCD Student Awards

Students Recognized for Outstanding Academic and/or Extracurricular Achievements

Undergraduate Stage 4 Medals & Project Prizes 2024/25

Every year, the School of Chemistry celebrates outstanding achievement by presenting <u>Undergraduate Medals</u> to students who have excelled in the final year of their studies. This year's winners are:



Nicole Perets was awarded the Professor Dervilla Donnelly Medal (Stage 4 Medicinal Chemistry & Chemical Biology).



Emilia Kazek received the *Professor Howard Sidebottom Medal* (Stage 4 BSc Chemistry with Environmental & Sustainable Chemistry).



Felix Schlosser was awarded the *Hugh Ryan Memorial Medal* in absentia. This prize is awarded to the student who obtains first place in Chemistry (BSc (Hons) Degree Examination).

Congratulations to Emilia Kazek for winning the **Best Stage 4 Project Prize 2024/25** and for publishing her research in collaboration with <u>Dr Leila Negahdar</u>, titled "Insight into the activity and mechanism of FeNiB LDH electrocatalysts in alkaline OER via operando DRIFTS" in <u>RSC Catalysis Science & Technology</u>. It is an exceptional achievement at the undergraduate level. Discover the full story on our website <u>here</u>.



Nicole Perets, James Sullivan, Emilia Kazek



Nicole Perets is awarded the Professor Dervilla Donnelly Medal by Professor James Sullivan



Emilia Kazek receives her Professor Howard Sidebottom Medal from Professor James Sullivan



Leila Negahdar presents Emilia Kazek with her prize for Best Stage 4 Project 2024-25



Emilia Kazek's Project 2024-25 - "Insight into the activity and mechanism of FeNiB LDH electrocatalysts in alkaline OER via operando DRIFTS"

Publications from staff and students in the School

Publications from the Guiry Research Group

 \blacktriangleright Asymmetric Synthesis and Biological Evaluation of 1,3- and 1,4-Disubstituted Isoquinoline-Containing Lipoxin A_{Λ} Analogues

(Denise Moran, Monica de Gaetano, Braden Millar, Catherine Godson, Patrick J. Guiry)

Read more at Chem. Eur. J. 2025, e202502091 https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202502091

 \Rightarrow Catalytic enantioselective synthesis of α -allyl- α -aryl 1-indanones via palladium-catalysed decarboxylative asymmetric allylic alkylation

(Cian Kingston, Fiach B. Meany, Yannick Ortin, Patrick J. Guiry)

Read more at Tetrahedron 2025, 183, 134713 link here

Publications from the McGarrigle Research Group

Photochemical carbosulfonylative cross-coupling of alkenes

(Vanessa E. Becker, Mandapati Bhargava Reddy and Eoghan M. McGarrigle)

Congratulations to Vanessa and Bhargava on their latest paper on making C-C and C-S bonds using photochemistry in Org. Biomol. Chem

Read more at *Org Biomol Chem* **2025,** 23, 84893-8498. V E Becker, M B Reddy, E M McGarrigle* — Photochemical carbosulfonylative cross-coupling of alkenes. DOI: 10.1039/D50B01229E

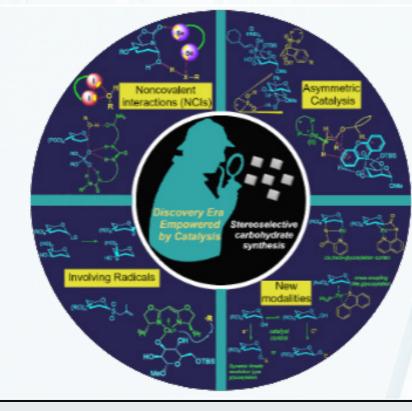
News from the Loh Research Group

Catalytic Strategies for Stereoselective Carbohydrate Synthesis: Emerging Concepts for

Accessing Challenging Glycosides

The Loh group just published an important go-to review in Angewandte Chemie to offer an aerial perspective of emerging concepts that had shaped the modern landscape of catalytic carbohydrate synthesis. Significantly, the current 4 key pillars of noncovalent catalysis, radical catalysis, asymmetric catalysis, new catalytic modalities and their conceptual interconnectedness are consolidated in this review. This compilation serves as a stepping stone for the broad chemistry community into the transformative domain of catalytic carbohydrate synthesis.

Read more at *Angew. Chem. Int. Ed.* **2025,** DOI: 1 0 . 1 0 0 2 / a n i e . 2 0 2 5 1 4 1 6 7 https://onlinelibrary.wiley.com/doi/full/10.1002/a nie.202514167



Publications from staff and students in the School

Publications from the Baumann Research Group

Photochemical Flow Synthesis of Trisubstituted Oxazoles Enabled by High-Power UV-B LFD Modules

(Ruairi Crawford, Rémy Broersma, Frouke van den Berg, and Marcus Baumann)

Well done Ruairi on publishing his latest research on using novel UV-B LEDs in Organic Letters.

Read more at Org. Lett. 2025, 27, 36, 10152–10156 (Photochemical Flow Synthesis of Trisubstituted Oxazoles Enabled by High-Power UV-B LED Modules | Organic Letters).

Seneration of Lithium Ethenolate by Lithiation of Tetrahydrofuran in Flow Mode (Parth Naik, Patrick O'Neill, Julia Bruno–Colmenarez, and Marcus Baumannn)

Congratulations to Parth on publishing his work in collaboration with Pfizer Ireland in OPRD! "Generation of Lithium Ethenolate by Lithiation of Tetrahydrofuran in Flow Mode"

Read more at Org. Process Res. Dev. 2025, ASAP (Generation of Lithium Ethenolate by Lithiation of Tetrahydrofuran in Flow Mode | Organic Process Research & Development).

>>> Photochemical Synthesis of Ynones from Aryl Aldehydes and Sulfone-Based Alkynes (Adam Cruise and Marcus Baumann)

Another paper published by the Baumann group showcases the use of radicofugal groups in photochemical addition reactions between aldehydes and alkynes retaining the pi-bond in the resulting ynones. Well done Adam! "Photochemical Synthesis of Ynones from Aryl Aldehydes and Sulfone-Based Alkynes." Adam Cruise and Marcus Baumann

Read more at J. Org. Chem. 2025 ASAP (Photochemical Synthesis of Ynones from Aryl Aldehydes and Sulfone-Based Alkynes | The Journal of Organic Chemistry).

News from the Elghobashi-Meinhardt Research Group

Nadia Elghobashi-Meinhardt was proud to represent UCD Chemistry EuCompChem2025 conference in Naples, Italy in September. The conference brings together theoretical computational chemists around the world and showcases the latest developments in a wide topics including range of electronic-structure theory, machine learning, catalysis, computing and software.



Conferences/Events Attended

News from the Guiry Research Group

ESOC 2025 Conference

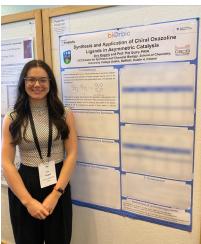
Some members of our group attended the ESOC 2025 conference in July. We had an amazing time in Copenhagen presenting our research and attending some exceptional talks.

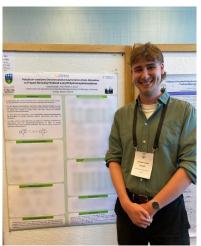


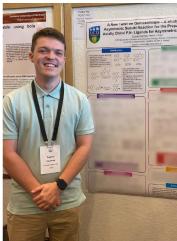
Poster Presentations

Our 2nd years Liam, Ava, Jordi, and Eoghan also presented at the poster sessions:

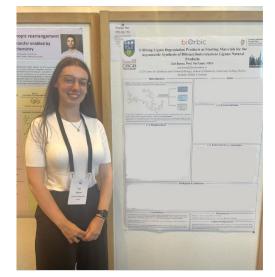


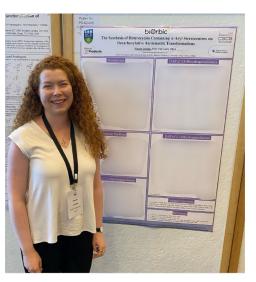






Our final years Niamh and Zoe presented on their work at one of the poster sessions:





Conferences/Events Attended

News from the Guiry Research Group

Over the past few months, some of our students have been on placement in Universities abroad. Zoe worked in RWTH Aachen in the Schoenebeck research group:



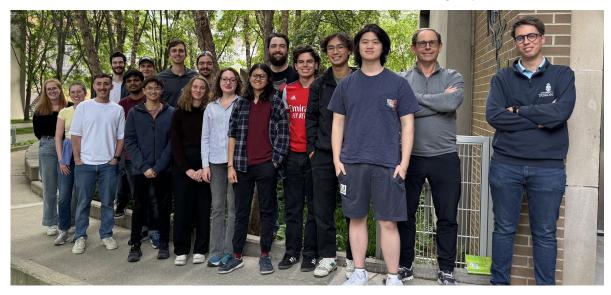
Sarah worked with Debabrata Maiti in IIT Bombay:



Paul was in University of Wisconsin–Madison working with Tehshik Yoon and his group:



Aoibhínn travelled to Toronto to work in the Lautens group:



Conferences/Events Attended

SINFERT at UCD SDG Week 2025



L to R: Dr Rajan Choudhary, Dr Kirill Nikitin, Ms Sara Guigu and Ms Ema Vranic

The **SINFERT Project** was delighted to host a seminar on Tuesday, 23 September 2025, as part of **UCD SDG Week** 2025.

Our session, "Efficient Recovery of Phosphorus from Biowaste", highlighted how the team is pioneering a sustainable, circular process to recover high-grade phosphorus from biowaste streams—shaping the future of green innovation.

Dr Kirill Nikitin, Dr Rajan Choudhary, Ms Ema Vranic, Ms Sara Guigui and Dr Maham Hussain are the team leading this journey.

We would like to thank all the students, researchers, industry partners, and sustainability advocates who joined us for this engaging discussion on the future of green phosphorus recovery.



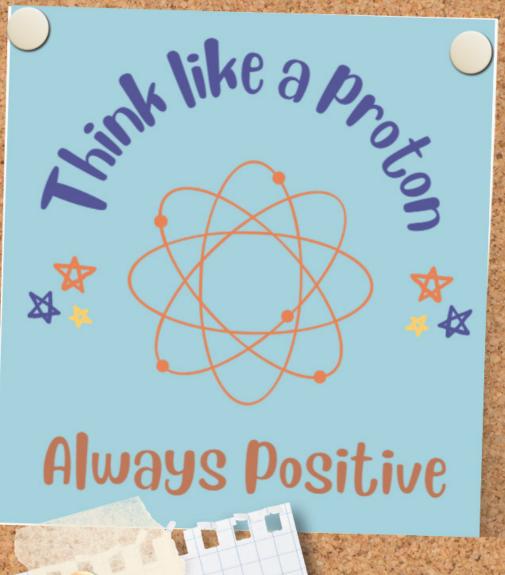
23rd September Science Center, UCD

Discover how we are developing a sustainable circular process to recover high grade phosphorus from biowastes.





School Of Chemistry Notice Board



what did the thermometer say to the measuring cylinder?

Answer: "You may be graduated.

Answer: have several degrees."





DATES FOR YOUR DIARY

See details of upcoming seminars at https://www.ucd.ie/chem/newsevents/schoolofchemistryseminarseries/

28th Wheeler Lecture by Prof. Polly Arnold

Organometallic Actinide Chemistry in High Oxidation Stress

Date and time: Thur 9th October at 4 pm Location: Theatre D, Science

Followed by a reception on 4th Floor Science - East R

>>>> Reserve your ticket here here «

Seminar with UCD Alumni Awardee - Dr Úna McCarthy-Fakhry Beyond the lab: A chemist's journey to inclusive STEM education

We're delighted to invite you to a seminar with **Dr Úna McCarthy-Fakhry**, this year's recipient of the UCD Alumni Award. Learn more about Dr McCarthy-Fakhry <u>here</u>

In this seminar, Úna will share how her time at UCD shaped her confidence and skills, and how embracing a non-linear career path led her to unexpected opportunities, from pharmaceutical development and patent examination to leading inclusive STEM education initiatives in Cambodia, Africa, and now globally with UNESCO in Paris.

Date/Time/Location: Fri 17th October at 12pm, room S1.67

Followed by a short tea and coffee reception on the 2nd Floor of Science South