



School of Chemistry News March 2023



Welcome to....

We are delighted that Elaine Mackey was recently successful in the competition for the permanent post of School Office Administrator. Elaine has been working in the School Office since November 2022 on a temporary basis. She will now take over responsibility for graduate research administration, and during the coming summer, will also take over the administration of graduate taught programmes. If you haven't already met Elaine please do call into the School Office to say Hello.

Awards, Funding and Recognition

This has been a really *outstanding* month for success, recognition and good news in our School and there is a huge amount to celebrate.

Congratulations to Marcus Baumann, who has been promoted to Associate Professor. Marcus joined this School in 2017 as Assistant Professor on a temporary contract, and was made permanent in 2019. Since joining UCD, Marcus has established a thriving [Flow Chemistry Research Group](#), frequently publishes his work in high impact international journals and has

been very successful at securing external funding. Well done to Marcus on a very well-deserved promotion.

Congratulations to Professor Pat Guiry, who has been elected as the 58th President of the [Royal Irish Academy](#), Ireland's leading body of experts in the sciences and humanities. Accepting the role, Pat said -"As President it will be my privilege to work with members, officers and staff to promote the Academy as an independent, all-island learned society that provides expert scholarly advice to inform policy and civic society, responding in a flexible/timely manner to the ever-changing (inter)national research/education environment, with a particular focus on the research funding of STEM and the Arts, Humanities and Social Sciences". It's a privilege and very exciting for our School to have a colleague in this influential role, and we wish Pat every success in his new post.

Congratulations to Professor Kenneth Dawson, who has been awarded an ERC Advanced Grant for his project *FunctionalNanoTher*. The ERC Advanced Grant funding is amongst the most prestigious and competitive EU funding schemes, providing researchers with the opportunity to pursue ambitious, curiosity-driven projects that could lead to major scientific breakthroughs. They are awarded to established, leading researchers with a proven track-record of significant research achievements over the past decade. The funding will enable researchers to explore their most innovative and ambitious ideas. Kenneth said "The ERC Advanced Grant will allow us to push far beyond the boundaries of our current understanding, following new and bolder scientific concepts of RNA (and other nanoscale) therapeutics that will target currently intractable diseases, safely. Such a focussed and ambitious scientific effort owes much to the persistent efforts of our group's dedicated staff and young researchers over some years. During that period the ideas were built up and validated, step by step. It also owes much to a critical and timely Science Foundation Ireland (SFI)-ERC support grant that allowed us to establish that the programme has good prospects for success." This news is fantastic, not just for Kenneth and his team, but also for the School and wider University. Please see the UCD [press release](#) for more details.

A massive congratulations to Professor Stefan Oscarson, who is one of the recipients of the [2023 NovaUCD Innovation Awards](#). The Award recognises excellence in innovation or of successes achieved in the commercialisation

of UCD research or other intellectual activity over a number of years. The award relates to the development of a [novel mucolytic drug](#) which has potential to address a large unmet medical need for patients with mucus-associated lung diseases. "It's really exciting times for me now, when after more than 40 years of academic research involving drug and vaccine development, seeing an excellent and fun team effort leading to the possibility of a lead candidate going into human clinical trials. It feels great to receive the NovaUCD Innovation Award with Steve as a recognition of this achievement." Congratulations to Professor Stephen Carrington, who retired from the UCD School of Veterinary Medicine in 2016, as the other recipient of this award.



Students from the School of Chemistry also collected a number of awards this month. Congratulations to the following students, on their Academic & Student Achievement awards from the College of Science:
Vanessa Nobis, Emilija Stankeviciute, Tara Joyce, Sorcha Daly, Ishita Solanki, Felicity Devlin, Shanigwa Klein, Niamh Carey, Jan Hebrík, Liam Jowett and Amber Barry.

At the UCD Awards day, a number of students also picked up Academic/Global Excellence & Excellence in Student Activities awards. Congratulations to: Tara Joyce, Kacper Kluza, Ishita Solanki, Vanessa Nobis, Jan Hrebík and Christine Coffey.

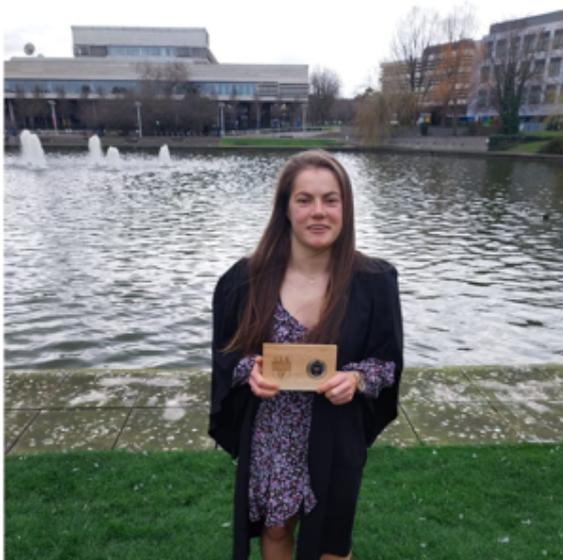
A little more on two of the awardees....

Amber Barry, from the O'Reilly research group, was awarded a recognition of student achievements from the College of Science for "Leadership Ability or Personal Achievement, as shown through involvement in Science-based activities, which help make the UCD Science Community a more exciting, enjoyable and engaged environment". The O'Reilly group members are beaming with pride, and all agree Amber deserves this award. Well done Amber!!



Congratulations to Christine Coffey, a PhD student in Tom Hooper's group, on receiving the UCD President's Award for Excellence in Student Activities for her involvement in UCD Rugby as former Womens Rugby captain and current club president. Well done Christine!

Pictured below: Christine Coffey receiving her award, also pictured alongside Chemistry Undergraduate awardee, Jan Hrebík.



Congratulations to Undergraduate Chemistry student, Nicola Tuthill, on winning a silver medal at the U23 Women's Hammer Throw at the European Throwing Cup.

Well done to Kian Donnelly, who secured an RSC Researcher Development and Travel grant allowing him to attend the upcoming European Symposium on Organic Chemistry in Ghent and present his PhD research.

1st year PhD student Ruairi Bannon was interviewed about his experience doing an industry placement with Almac Sciences after finishing his degree at QuB – you can read the details here: [Postgraduate Contact with the Life Sciences Industry \(themedicinemaker.com\)](https://www.themedicinemaker.com/postgraduate-contact-with-the-life-sciences-industry)

Congratulations to Pallavi, from the Johnson research group, who won best poster at the 10th Analytical Biosciences Group Early Career Researcher Meeting 2023.

Congratulations to Leila Negahdar, Marcus Baumann, Demetra Achilleos and James Sullivan on their successful SATLE Funding application for the "Development of Sustainable Chemistry in Undergraduate Teaching Laboratories". This initiative aims to further enhance the undergraduate practical experience for our students and increase the Sustainability of our Laboratory sessions and promises to be a great initiative. Well done all!

School News, Events & Activities

On March 31st, the postdoctoral and EDI committees in the Schools of Chemistry, and Maths & Stats. welcomed students and staff to their event “Not Just the 8th of March 2.0: How do we Dream Big?” in celebration of International Women’s Day. The goal of the event was to give participants a flavour of EDI issues and challenges encountered in their professional lives, and how best to overcome them. Ultimately, the organisers wanted to inspire the audience to follow their dreams and passions in their career path - and speakers did a truly amazing job with this.



The poster features the UCD Dublin logo on the left, which includes three stylized buildings and a harp. The text 'In Celebration of Women's Day' is at the top right. The main title 'How do we Dream Big?' is in a large, white, handwritten-style font. Below the title are three images: a woman in a white astronaut suit, a woman with glasses, and an older woman. To the right of these images, the event details are listed: 'UCD cinema', '31st March', and '11 am - 1 pm'. At the bottom, it says 'Organised by the Postdoctoral and EDI committees in the Schools of Chemistry and Maths & Stats'. The bottom of the poster has a colorful geometric pattern.

In Celebration of Women's Day

How do we Dream Big?

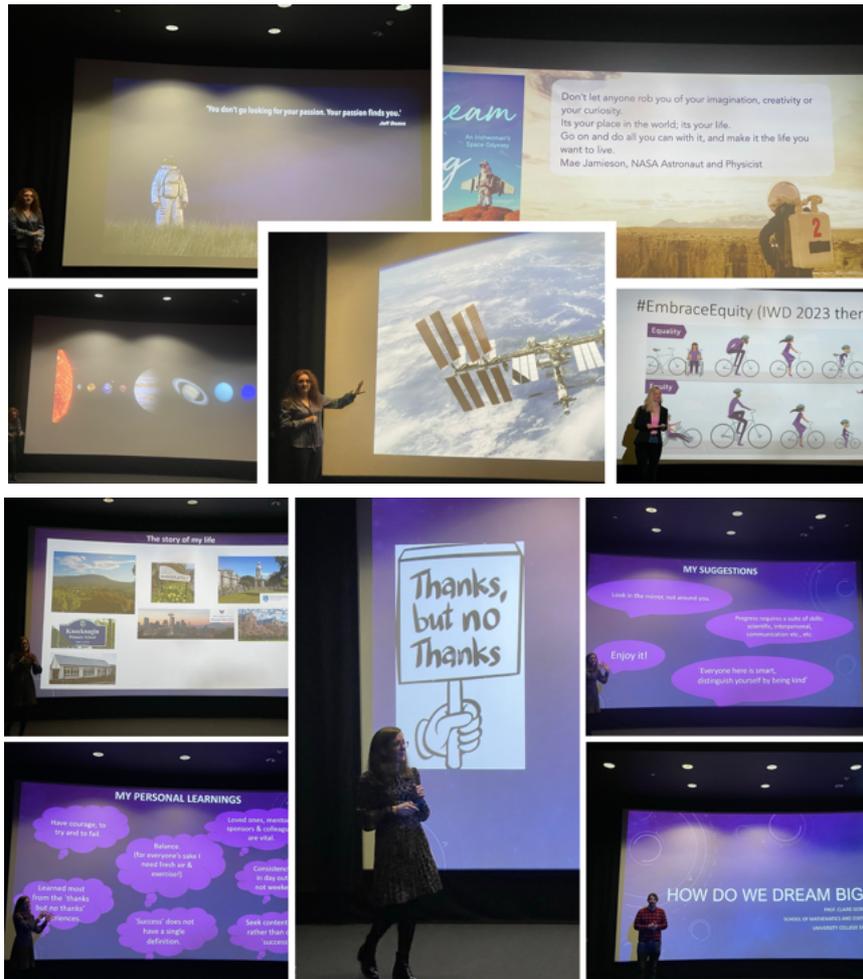
UCD cinema
31st March
11 am - 1 pm

Dr Niamh Shaw Prof Claire Gormley Prof Dervilla Donnelly

Organised by the Postdoctoral and EDI committees in the Schools of Chemistry and Maths & Stats

The three invited speakers, [Dr Niamh Shaw](#), [Professor Claire Gormley](#) and [Emeritus Professor Dervilla Donnelly](#) delivered inspirational talks about their career pathways. At the event, a portrait of Dervilla, painted by resident UCD artist [Emer O'Boyle](#), was unveiled and will soon move to its new home in Science Centre South. Many congratulations to the amazing team of postdocs who organised this event; it was a really wonderful event!

Please take a look at some of our own inspirational female scientists, who tell us a little about themselves in their [short videos](#); also in celebration of International Women’s Day.



Postdoc Research Seminar

This March, we had another opportunity to hear about some of the super research being carried out by postdocs in the School. Dr Mandapi Bhargava Reddy, from the McGarrigle group delivered a fabulous talks on 'Visible-Light-Induced Transition-Metal-Free Difunctionalization of Alkynes' and Dr Adrià Martínez Aviñó, from the Johnson group gave a really excellent talk on his analytical chemistry research 'Towards Portability in Analytical Chemistry'. These talks were very well attended by staff and students and are becoming a really important event in our School's research calendar.



News from the Technical Team

The electronics workshop is now opening up a new service for 3D printing, using a Formlabs Form 3B state of the art resin printer. This sounds like it will be a really excellent service for the School, and no doubt there will be lots of interest. Please contact Val for more information.

Please note that the X-Ray Laboratory will now operate from 8:00 am to 4:00 pm.

STEM Research Day

Elaine O'Reilly co-organised a STEM Research Day involving the Colleges of Science, Engineering & Architecture, and Health & Agricultural Science, where there were a number of flash talks from colleagues in Chemistry. A very special thanks to Dr Patricia Fleming, who was absolutely integral to the excellent planning and execution of the event.



ChemSoc News

Daffodil Day

ChemSoc's 5-A-Side Tournament was a great success, with four teams from ChemSoc, Pharmtox Society and Chemistry academic staff. Thank you to everyone who took part. The event was held on Daffodil Day, March 24th, and was in aid of the Irish Cancer Society. Thanks to everyone who has donated. Any more donations towards the Irish Cancer Society would be much appreciated, [link to donate](#).



PharmTox Ball

ChemSoc are delighted to announce that the PharmTox Ball will take place this year on **Friday 21st of April** in the **Talbot Hotel Stillorgan!** The ball will be held **in aid of Breakthrough Cancer Research**. As usual, the PharmTox committee has given ChemSoc a limited number of tickets to sell to any interested postgrads, postdocs and academic staff in the School of Chemistry. Tickets will cost €60 (cash only) and will be sold on a first come, first served basis. Please contact chemical.society@ucd.ie for more information!

Annual Inaugural Lecture

ChemSoc are also pleased to announce that the **77th Annual Inaugural Lecture** will take place this year on **Thursday 27th of April** from **3pm** with a reception to follow. This year's speaker is Prof. Tomislav Rovis of Columbia University. The formal invitations are currently being circulated so please **save the date!** The Annual School Medal Awards Ceremony will take place at 2pm, just before this.

Research talks and visits in the School

Tony Keene recently worked with Maeve Clancey, a well-known Irish artist, on the story of Kathleen Lonsdale who was one of the early pioneers in crystallography. One of her major achievements was to prove that benzene was flat and delocalised. Tony attended the opening of the exhibition at Riverbank Arts Centre in Newbridge, not far from Londale's birth place. Check out this link for more information.

<https://www.riverbank.ie/event/visual-art-kathleen-lonsdale-an-exhibition-by-maeve-clancy/>

Tony has been busy, because he also recently visited Ukraine to volunteer at the Lviv Volunteer Kitchen (also known as Front Line Kitchen), which prepares ration packs for frontline troops and distributes aid items to civilians and the military. While this was strictly a holiday not connected with UCD, he discussed the idea of setting up production of chemical hand warmers should the conflict carry on into the next autumn and winter. Anyone interested in their work can find out more at <https://twitter.com/frontlinekit>. Well done to Tony for getting involved in this important work!

Congratulations to Clara Zehe who presented a poster on her carbon dot work and to Mark Stitch who gave a talk on his ultrafast studies of quadruplex DNA at the SFTC CLF Artemis, Octopus and Ultra user meeting held in St. Catherine's College Oxford 27-29th March.

Marcus Baumann had a number of lecture invites this month, showcasing the power of merging photochemistry with flow processing. He visited the University of Naples/Italy, the Universities of California at Davis and Santa Cruz, as well as the Flow Chemistry European Summit 2023 at Rotterdam/Netherlands. It has been noted that he brought back neither Italian nor Californian wine, despite numerous requests from colleagues!

Dr Gita Singh, from the Keene group, has just been on a two-week Short-term Scientific Mission with a COST Action on carbon materials. She worked with Dr Sharli Malik at Karlsruhe Institute of Technology on Raman and XPS studies of carbon materials for energy storage devices made from renewable feedstocks.

The postgrads from the Keene group are attending the 19th [BCA/CCG Intensive Teaching School in X-Ray Structure Analysis](#) to learn specialist skills in X-ray structure determination techniques. This is ahead of the group attending the BCA Spring Meeting in Sheffield where two of the group are presenting posters and talks. Enjoy!!

As President of the EUChemS Division of Organic Chemistry, Pat Guiry organised a webinar 'Highlighting Organic Chemistry in Spain', which was the 4th in the series. This had 357 registered attendees and on average 250 attendees.

New Doctor in the House!!!

Many congratulations to Dr Nathan Feely from the Lee research group, who passed his viva this month.

Well done to Dr Cormac Bracken, from the Baumann group, for passing his PhD viva this month.



Congratulations to Dr Mark Stitch, from the Quinn group, for passing his viva this month. Thanks to Prof. Stephen Meech who acted as the external examiner and Tony Keene and Elaine O'Reilly who acted as the internal and chair.



Congratulations to Dr Francesca Nacca, from the Phillips Group, who passed her viva on the 27th March. Thanks to Prof Fabio Marchetti who acted as the external examiner and Tom Hooper and Declan Gilheany who acted as the chair and intern respectively.



Recent Publications from the School

Congratulations to Dr Vivek Sunderavel and Pat Guiry, who had a review accepted in Chemistry: A European Journal "Recent Advances in the Catalytic Enantioselective [3+2] Cycloaddition of N-Metalated Azomethine Ylides".

A new paper by Mara, Silvia and Adam from the Baumann group reports on the discovery of a new antibacterial lead that was identified via a collaboration with partners from Genoa. [Antimicrobial Evaluation of New Pyrazoles, Indazoles and Pyrazolines Prepared in Continuous Flow Mode](#) Adam Burke, Mara Di Filippo, Silvia Spiccio, Anna Maria Schito, Debora Caviglia, Chiara Brullo and Marcus Baumann *Int. J. Mol. Sci.* **2023**, 24(6), 5319. [DOI: 10.3390/ijms24065319](https://doi.org/10.3390/ijms24065319)

Congratulations to Vitaly Buckin and his team on two recent publications. Rian Lynch, Vitaly Buckin, Determination of lactose in milk by high-resolution ultrasonic spectroscopy, *International Dairy Journal*, 139, 2023, 105566

(<https://www.sciencedirect.com/science/article/abs/pii/S0958694622002503>)

and Georgios I. Papoutsidakis, Vitaly Buckin, Real-time monitoring of enzymatic hydrolysis of 1,3(4)- β -glucan with high-resolution ultrasonic spectroscopy, *Food Hydrocolloids*, 138, 2023, 108426.

(<https://www.sciencedirect.com/science/article/abs/pii/S0268005X22009468>)

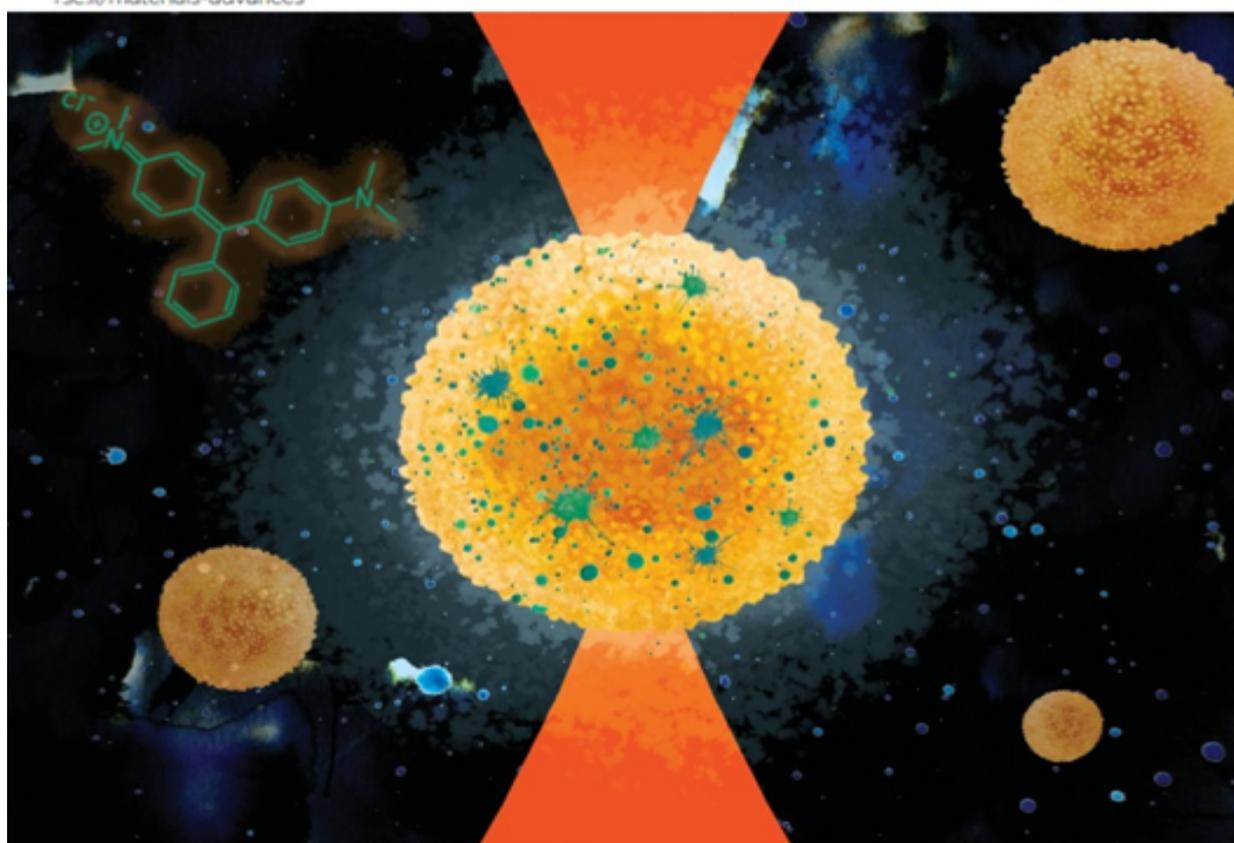
Congratulations to the Quinn group on wonderful cover art for their recent paper;

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, *Mater. Adv.*, 2023,4, 1481-1489.

Materials Advances

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PAPER
Susan J. Quinn et al.
Microsphere-supported gold nanoparticles for SERS
detection of malachite green

Save the Date!

April 19th: The School of Chemistry EDI Committee would like to formally invite you to attend the 2nd EDI Symposium: Behind the Position - Let's Talk About Race: Bridging the Gap in Science. This event will take place in the UCD Village Auditorium on April 19th, 2023 from 10:30 - 13:00. Register [here](#).

April 27th: School Undergraduate Medal Awards Ceremony at 2pm and ChemSoc's Inaugural Lecture will take place on April 27th from 3pm.

May 16th: School of Chemistry Research Day in H2.40 Science Hub. It will include research talks from recently arrived academic staff in the School followed by lunch. All staff in the School are welcome to attend. Please save the date.