

# School of Chemistry News October 2022

## Welcome to New Staff and Students:



A warm welcome to all new postdoctoral researchers, postgraduate students and academic and technical staff who have joined the School recently:

- Bodhayan Biswas and Dr M Bhargava Reddy who joined Dr Eoghan McGarrigle's research group
- Celine Erkey who joined Dr Marina Rubini's group, and become an active member of the School's EDI Committee
- Daniel Molloy who joined Prof James Sullivan's research group
- Zoe Walsh and Daniel Graczyk who recently joined Dr Susan Quinn's research group
- Dr Patricia Fleming who recently joined Dr Elaine O'Reilly's group as a Research Assistant
- Dr Leila Negahdar has joined the School as an Assistant Professor in Environmental and Sustainable Chemistry
- Dr Julia Bruno has joined the School as a Technical Officer looking after the X-ray and SQUID facilities
- Dr Michelle Doran has joined the School as a Technical Officer looking after purchasing

## Congratulations to the New Doctors in the House who have recently completed their viva:

- Dr Sandra Bulawa, from Professor Pat Guiry's group
- Dr Sadbh Byrne, from Professor Declan Gilheany's group
- Dr Judit Fodor, from Dr Andrew Philips' and Susan Quinn's group



## Recent Promotions:

Congratulations to Hans Eckhardt on his recent promotion to Senior Technical Officer

## Awardees:

Congratulations to Dr Grace Morgan on being awarded the 2022 Boyle-Higgins Gold Medal and Lecture Award from the Institute of Chemistry of Ireland. Grace follows David Browne, Dervilla Donnelly, Donald Fitzmaurice, Rory More O'Ferrall, Frank Hegarty and Pat Guiry from the School in winning this award.

The associated lecture will be given at 10.00 am on Thursday November 17 at the Royal Irish Academy. This will be part of a full day symposium which will also feature two other award lectures: ICI Eva Philbin Award to Carmel Breslin, Maynooth University and the 2021 Boyle Higgins Gold Medal Award lecture from Prof. Tadhg Begley (Texas A&M) as well as talks from other speakers.

Congratulations also to PhD students Maria Rosa Fernandez Pison, Francesca Guilia Nacca and Mara Di Filippo on winning the SSPC's EDI award, recognising their exceptional commitment to the promotion of EDI. The award relates to their organisation of a successful EDI symposium in May.

## Sporting Success!

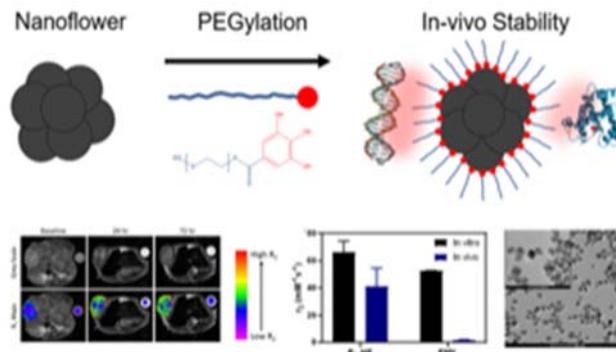
Many congratulations to our Chemistry tag team, who won the Autumn League Super Bowl trophy on October 25th (pictured below). They are also looking for new recruits to join their team so contact David ([david.mc-laughlin@ucdconnect.ie](mailto:david.mc-laughlin@ucdconnect.ie)) if interested.



## Recent Publications:

1. 'Photophysical Properties and DNA Binding of Two Intercalating Osmium Polypyridyl Complexes Showing Light-Switch Effects'. Mark Stitch, Rayhaan Z. Boota, Alannah S. Chalkley, Tony D. Keene, Jeremy C. Simpson, Paul A. Scattergood, Paul I. P. Elliot, Susan J Quinn, *Inorg. Chem.* 2022, 61, 38, 14947–1496.
2. 'Emerging magnetic fabrication technologies provide controllable hierarchically-structured biomaterials and stimulus response for biomedical applications'. J. K. Wychowaniec, D. F. Brougham. *Advanced Science*. 2022, 202202278. IF 17.52.
3. 'Growth and differentiation of human induced pluripotent stem cell (hiPSC)-derived kidney organoids using fully synthetic peptide hydrogels'. N. J. Treacy, S. Clerkin, J. L. Davis, C. Kennedy, A. F. Miller, A. Saiani, J. K. Wychowaniec, D. F. Brougham, John Crean. *Bioactive Materials*, 2022, 21, 142-156. IF 16.87.
4. 'Formation of hydrated PEG layers on magnetic iron oxide nanoflowers shows internal magnetization dynamics and generates high in-vivo efficacy for MRI and magnetic hyperthermia'. E. P. McKiernan, C. Moloney, T. R. Chaudhuri, S. Clerkin, K. Behan, R. M. Straubinger, J. Crean, D. F. Brougham. *Acta Biomaterialia*, 2022, 152, 393-405. IF 10.12.

- *This study describes a novel approach to strongly bind polyethylene glycol (PEG) to NFs ensuring good long-term colloidal stability in buffers and media, extended blood circulation times in a pancreatic cancer model and particle stability in the tumour microenvironment.*



### Recent Grants:

Elaine O'Reilly on her IRC Laureate Consolidator Award: BindCat - Turning Binding Proteins into Catalysts for Late-Stage Functionalisation of Natural Products.

### Recent Research Talks and Visits:

- Dr Gita Singh, working in Dr Tony Keene's group, presented her research on '*Sustainable electrodes for energy storage devices*' at the Full Action meeting of COST EsSENce, in September;
- Maria Byrne gave a talk on her research "*Dual Emissive Silica Nanomaterials for DNA Sensing*" at the Molecules II SSPC meeting held in Maynooth in September;
- The Quinn group Hosted a visit by Dr Andrew Ward (28-30th September) from the Central Laser Facility who provided training on our laser optical tweezers apparatus;
- Dr Susan Quinn gave a seminar in TCD in October on "*Resolving Light-Activated Processes of DNA Bound Transition Metal Polypyridyl Complexes, Insights for Diagnostics and Therapeutics*" and also Delivered a plenary talk "*Time-Resolved Infrared Spectroscopy, a Powerful Tool for the study of Sensitized DNA Photooxidation*" at the Molecular Photophysics Conference III held in Newcastle in September.

## **Postdoc Coffee Mornings:**

Postdocs in the School are invited to meet every Tuesday morning at 9.30am in the 1st floor kitchen. The first of these coffee mornings has already taken place!

## **Upcoming Events:**

*Please save the following dates in your diary:*

- Thursday 3rd November @ 3pm - Prof. Dr Beat Ernst, from the University of Basel, will deliver a Research Seminar in S3.56 SCS
- Tuesday 15th November from 10.30-11.30am - UCD IT services will be taking professional headshots of postdocs for their RMS profiles, on the top floor of Science East. Any staff wishing to avail of this service can go along also.
- Wednesday 16th November from 1-2pm - PostDoc Seminars followed by a PostDoc Forum in E1.19 Science East. All staff and postgrads are invited to the seminars.
- Thursday November 17th at 10am - 2022 Boyle-Higgins Gold Medal Lecture in the Royal Irish Academy.
- Friday December 2nd @ 3pm - Christmas Celebration, 3rd Floor of SCS. All staff, postgraduates and 3<sup>rd</sup> / 4<sup>th</sup> year students are invited for a drink and mince pie.
- Thursday December 8th @ 3pm - Inaugural lectures from Professor Dermot Brougham and Professor James Sullivan, following their recent(ish) promotions.