issue 1

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Irish Chemical Events

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issue 1

Editorial: *First issue of a community archive*

Editor: Joseph P. Byrne

Published: 25/10/2025

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This is the first collected issue of *Irish Chemical Events*, collecting all event reports submitted from the archive's foundation in mid-2024 to November 2025. Since this archive came into being, I have been delighted to curate reports from established and early-career academics, postgraduate and undergraduate students, retired chemists, educators and more about all the compelling activity across disciplines in our community and across Ireland. These have included national and international conferences, social events, prestigious visiting speakers, book launches, markings of milestones, and include snapshots of a vibrant chemistry community.

This collection was initially proposed for use by events sponsored by the Royal Society of Chemistry Republic of Ireland Local Section – and indeed includes many events supported by this group – but I have been thrilled to see submissions from other groups, including the Institute of Chemistry of Ireland, and the Irish Biological Inorganic Chemistry Society. The door is always open for additional submissions in keeping with the general goals of the collection. Events in companies, schools and third-level institutes as well as social events and milestones are all part of our community, and other chemists will benefit from seeing which activities are taking place.

Irish Chemical Events is an open-access platform to collect reports of events organised by or for the Irish chemistry community, which may be shared, cited and reproduced in other forums. This includes academic meetings, symposia and conferences, public outreach events, industrial events, networking and community building events, careers events focussed on the chemical sciences (and related fields), and many more besides. I and others conceived of this collection as a way to capture important research outputs *beyond traditional publications* (in line with DORA principles), create a persistent historical record of activities within the chemistry community in Ireland, and acknowledge the significant contributions event organisers and funders make to the community.

I hope this will be the first of many annual issues and special collections, and that we will welcome curators and submissions from other sponsors and independent events going forward. If you are organising any events that include, promote or celebrate chemistry or chemists, please reach out and consider adding a report to this growing collection.

A list of archive curators are provided on the community web-page, and reports may be submitted to one of the names listed for consideration.

Irish Chemical Events

eagrán 1

Eagarfhocal: *Céad eagrán na cartlainne phobail*

Eagarthóir: Joseph P. Byrne

Foilsithe: 25/10/2025

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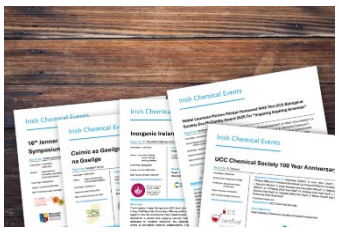


Seo é an chéad eagrán bailiúcháin de *Imeachtaí Ceimice na hÉireann*, a thugann le chéile tuairiscí a cuireadh isteach chuig an gcartlann ó bunaíodh é (i lár 2024) suas go dtí mí na Samhna 2025. Ó thús an bhailiúcháin, bhí áthas orm tuairiscí a fháil faoina gníomhaíochtaí spreagúla atá ar bun ag ár bpobal ar fud na hÉireann: tuairiscí fuinniúla ar imeachtaí trasna na ndisciplíní a seoladh chugainn ón lucht acadúil luathghairme, ó thaighdeoirí aitheanta, ó mhic léinn fochéime agus iarchéime, ó cheimiceoirí atá ar scor, ó oideachasoirí, agus araile. Ina measc, bhí comhdhálacha náisiúnta agus idirnáisiúnta, imeachtaí sóisialta, cuairteanna ó chainteoirí mór le rá, seoladh leabhair, ceiliúrthaí ar spriocphointí: léargais bhreátha ar phobal beoga na ceimice.

Beartaíodh ar an mbailiuchán seo a chur le chéile ar dtús le taifead a dhéanamh ar imeachtaí a reáchtáladh le tacaíocht Rannóg Áitiúil Phoblacht na hÉireann de Chumann Ríoga na Ceimice – agus ar ndóigh tá roinnt imeacht dá gcuid san áireamh. Ach bhí ríméad orm tuairsicí a fheiceáil ó ghrúpaí éagsúla eile, ina measc Institúid Ceimice na hÉireann agus Cumann Ceimice Bhitheolaíoch Neamhorgánach na hÉireann. Beidh fáilte is fiche roimh thuairiscí sa bhreis a thagann le hard-spriocanna an bhailiúcháin. Is páirt dár bpobail iad na himeachtaí comhlachta, scoile agus institúide tríú leibhéal, chomh maith le himeachtaí sóisialta agus ceiliúrthaí ar spriocphointí. Bainfidh ceimiceoirí eile tairbhe as léamh faoin réimse imeachtaí a bhíonn ar siúl againn.

Is ardán le rochtain oscailte é *Imeachtaí Ceimice na hÉireann* chun tuairiscí ar imeachtaí an phobail ceimice in Éirinn a bhailiú, tuairiscí atá reidh le roinnt, le lua agus le macasamhlú i bhfoirmeacha éagsúla. Ina measc, tá cruinnithe acadúla, siompóisiamaí agus comhdhálacha, imeachtaí for-rochtana poiblí, imeachtaí tionscail, imeachtaí lionraithe agus forbairt pobail, imeachtaí gairme (le béim ar na h eolaíochtaí ceimiceacha agus réimsí eile a bhaineann leo), agus tuilleadh sa bhreis. Bheartaigh muid ar an mbailiúcháin seo mar shlí chun aschuir taghde tábhachtacha a ghabháil *lasmuigh den raon foilseachán traidisiúnta* (de réir na bprionsabal DORA): chun taifead stairiúil a chruthú ar ghníomhaíochtaí ár bpobal a chruthú agus chun tacaiocht na n-eagraitheoirí agus maoinitheoirí a aithint.

Tá súil agam nach bhfuil san eagrán seo ach tús le sraith fhada bliantúil de bhailiúcháin ghinearálta, chomh maith le sainbhailiúcháin. Fáilteoidh muid roimh eagarthóirí agus le tuairiscí ó mhaoinitheoirí eile , chomh maith le tuarascáileacha faoi imeachtaí neamhspleácha as seo amach. Má tá tú ag eagrú imeachta ar bith a bhaineann leis an gceimic nó a chuireann an cheimic nó ceimiceoirí chun cinn, déan teagmháil linn le do thoil le thuarascáil a chur leis an mbailiúchán seo atá ag dul i méid.

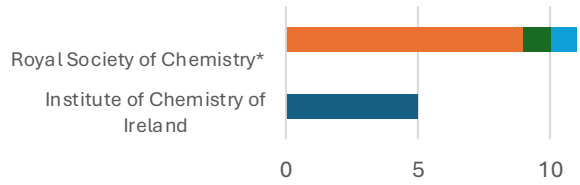
issue 1

Contents

Event Sponsors

Several different types of sponsorships and support enabled the events reported in this issue, in addition to the hard work and resources of the organisations, individuals and institutions which hosted the events. On this page is a summary of the level of support recognised in the collected reports as given by different learned societies, publishers, public and non-profit organisations and industrial sponsors. Each of these contributions make a huge difference to advancing chemistry in Ireland through various kinds of events. If any organisation wishes future issues to include details of how to request funding-support, please contact a curator of *Irish Chemical News*.

Learned Societies



*RSC: Republic of Ireland Local Section, Carbohydrate Interest Group and Diversity and Inclusion Fund

Public and Non-Profit Sector Sponsors

Universities: *Maynooth University* made three contributions to events: from the university directly (1), its Social Sciences Institute (1) and its Kathleen Lonsdale Institute for Human Health (1). *UCD* funded events through the College of Science (1), and the Equality Diversity and Inclusion unit (1). *Trinity College Dublin* Provost's Office supported an event. And the National University of Ireland supported an event in kind by providing a venue. **Research Ireland Centres:** SSPC (2), CÚRAM (1) and BiOrbic (1).

International Foundation: *Mizutani Foundation for Glycoscience* was partner for one conference.

State Body: *Fáilte Ireland* was partner for a conference.

Industrial Sponsors

Each of the companies below sponsored at least one event featured in this issue. Some have been particularly generous as regular exhibitors at a range of conferences and meetings. This support from suppliers, employers and stakeholders in the STEM sector is very important to such events taking place.

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Journals and Publishers

One event each in this issue was supported by *Dalton Transactions*, *Biochemical Journal* and CRC Press.

RSC Republic of Ireland Local Section Funding

It is wonderful to see so many inspiring events, workshops and activities being organised by members of the chemistry community throughout Ireland. Please consider sending a request for funding to the RSC Republic of Ireland Local Section committee. We want to support what you are doing and to help you to make a difference: *'Together, we're helping chemistry to change the world'*.

—**Prof. Sylvia Draper** FRSC, Chair of Local Section

Application form can be found on the Royal Society of Chemistry site https://members.rsc.org/site/content/Community/GeographicalNetworks/RepublicOfIrelandLocalSection.aspx

Institute of Chemistry of Ireland Event Support

The ICI has an annual budget which is set aside to support activities, events and initiatives organised in Ireland by our members and partners. The ICI Council welcomes applications that align with our mission to promote chemistry and represent the profession of Chemistry in Ireland. Details of the application process are given below.

—**Prof. Steven Bell** FICI, ICI President

Application form and eligibility details can be found on the ICI website: www.chemistryireland.org/awards-events/#otherevents

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Irish Chemical Events

7th Irish Biological Inorganic Chemistry Symposium (IBICS-7)

Report by: Joseph P. Byrne*, Sophie Kavanagh

Event Date: 15/12/2023 – 15/12/2023

Venue: UCD Village, Dublin 4

Event Type: Symposium

Report received: 31/08/2024

DOI: 10.5281/zenodo.14052293

http://zenodo.org/communities/ice

Organising Committee: Joseph P .Byrne (Chair),[a] Susan Quinn,[a] Andrew Phillips[a], Sophie Kavanagh[a]

[a] University College Dublin

Organisation: Irish Biological Inorganic Chemistry Society

Event Sponsors

Royal Society of Chemistry Republic of Ireland Local Section, Institute of Chemistry of Ireland, Mason Technology, GPE/Julabo, Merck, Accuscience.

Summary

The 7th annual symposium of the **Irish Biological Inorganic Chemistry Society** (IBICS) was held for the first time in **UCD** just before Christmas. IBICS organises an annual symposium, bringing together scientists and experts from universities and industries active in the field of bioinorganic chemistry. The programme was split into three sessions with 12 talks, covering different key themes throughout including but not limited to DNA targeting and sensing, anti-cancer complexes and metallodrugs against microbes. The symposium included two plenary lectures from Professor Ramon Villar (Imperial College London, UK) Professor Petra Heffeter (Medical University of Vienna, Austria), as well as two invited speakers Professor Denise Rooney (Maynooth University) and Professor Mathias Senge (Trinity College Dublin). The bulk of the programme gave opportunities for oral and flash presentations by early-stage researchers, while sixteen posters from universities all over Ireland formed the basis of discussion during the day-long event. This symposium gave IBICS members opportunities to present research to peers and hosted the Society's AGM. The day featured two poster sessions and wrapped up with a wine reception. Networking was an integral part of this event, allowing participants to share their passion for chemistry while also learning from accomplished experts in the field.

Attendees

The event's 87 delegates included postgraduate and academic researchers, and industrial exhibitors working in areas of inorganic chemistry, microbiology and life sciences, who together contributed to a wonderful inclusive atmosphere and highly enjoyable meeting. The majority of delegates were academics, postdocs and graduate students. The gender breakdown of delegates was approximately 40:60 female:male, with the programme of speakers also reflecting this, balancing male and female plenary and invited speakers, with a slight imbalance in contributed talks, reflecting the asymmetry of the delegate gender balance.

Target audience: Academics, Early Career (Academia), Industrialists, Postgraduates

Programme

The symposium took place over a full day, and the programme (Table 1) consisted of two international plenary speakers, two invited speakers from Ireland, a postgraduate award lecture, seven contributed oral presentations, seven flash presentations, and sixteen posters. The latter categories were mostly contributions from early career researchers, representing most universities in the Republic of Ireland. The AGM of IBICS also took place during the programme, as well as several networking sessions. Posters were displayed over two sessions, one during the lunch break and again during a dedicated hour-long session during the afternoon, which was sponsored by the RSC Republic of Ireland Local Section.

Early-career scientists from most Irish universities applied to speak and a balance was aimed for to represent the diversity of work happening across the country through inclusion of speakers from different institutions. Sessions were chaired by national leaders in the field of bioinorganic chemistry, Dr Ronconi, Dr Phillips, Dr Quinn and Prof. Marmion.

Proceedings

Session 1: Chair Dr Luca Ronconi

Professor **Ramon Vilar** (Imperial College London) opened IBICS-7 with a *plenary lecture* on targeting DNA with luminescent metal complexes. Prof Vilar is Professor of Medicinal Inorganic Chemistry and Vice Dean for Research at the Faculty of Natural Sciences. In his lecture, he focussed on non-canonical DNA structures, in particular guanine-quadruplex DNA, which have been identified as attractive anticancer drug targets. He presented results from his lab on imaging these DNA structures in cells and how light can be used to modulate and control the cellular properties of small molecules.

Continuing the theme of DNA sensing, **Maria Byrne** (Susan Quinn Group, UCD) delivered the first oral presentation of the morning, describing multi-emissive silica nanomaterials as sensors which bind DNA. She reported encapsulation of ruthenium polypyridyl complexes into SiO_2 nanoparticles and exploration of their sensing properties, including considerations for functionalising the surface of the nanoparticles with luminescent DNA probes.

Table 1. Programme of IBICS-7

Time	Speaker and title of presentation
10:00	Registration, coffee, and poster setup
10:30	Opening remarks: Professor Michael Devereaux, IBICS President
	Session 1, Chair: *Dr Luca Ronconi*
10:40	**Plenary: Professor Ramon Vilar** (Imperial College London) *"Targeting DNA with luminescent metal complexes – imaging and therapy"*
11:20	Maria Byrne (University College Dublin): *"Multi Emissive Silica Nanomaterials for DNA Sensing"*
11:35	Rhianne Curley (Dublin City University): *"Exploring the Efficacy of a Mitochondrial G4-Targeted Ruthenium(II) Complex in Cell Monolayers and Multicellular Tumour Spheroids"*
11:50	**Invited: Professor Denise Rooney** (Maynooth University): *"Medicinal Applications of Transition Metal Coordination Complexes of N-Based Heterocyclic Derivatives"*
12:20	**Flash Session, Chair:** *Dr Andrew Phillips* 3-minute talks, ***sponsored by Institute of Chemistry of Ireland***
12:35	Lunch (provided) and **Poster Session 1**
13:25	**IBICS Annual General Meeting**
	Session 2, Chair: *Prof Susan Quinn*
13:55	**Invited: Professor Mathias Senge** (Trinity College Dublin): *"On Trial: The Case of Aluminum Dipyrrinato Photosensitizers"*
12:35	Simon Poole (Dublin City University): *"The Generation of a New Class of Click Chemistry-Derived Di-nuclear Copper(II) Artificial Metallonuclease"*
14:40	Darren Beirne (Maynooth University): *"Pt(IV)-Sunitinib pro-drug conjugates displaying promising preliminary anti-cancer activity"*
14:55	Lewis More O'Ferrall (RSCI and TU Dublin): *"Ga(III) siderophore complexes - A Metallo-Trojan Horse Strategy to tackle Aspergillus fumigatus lung infections"*
15:10	Ella O'Sullivan (TU Dublin): *"Investigating Apoptosis Induction as a Mechanism of Action of Novel Metal-Dicarboxylate-Phenanthroline Complexes"*
15:40	**Poster Session 2, sponsored by RSC Republic of Ireland Local Section**
	Session 3, Chair: *Prof Celine Marmion*
16:40	Dr Neville Murphy (University of Galway): *"Intracellular behaviour of metallacarboranes through the lens of stimulated Raman spectroscopy"*
16:55	**Plenary: Professor Petra Heffeter** (Medical University of Vienna) *"Development of new strategies to overcome the therapeutic limitations of inorganic anticancer drugs"*
17:35	**Presentation of IBICS Postgraduate Gold Medal** Dr Amir Abdo (CÚRAM/University of Galway) *"Metalloporphyrins as Potential Nitric Oxide Scavengers for treatment of breast cancer"*
17:55	Prize-giving and closing remarks by Professor Michael Devereaux
18:00	**Wine reception**

Rhianne Curley (Tia Keyes Group, DCU) presented the *in vitro* behaviour of ruthenium complexes targeting mitochondrial guanine quadruplexes in cell mono-

layers, and multi-cellular tumour spheroids. The complexes effectively targeted mitochondrial DNA and demonstrated light-activated therapeutic activity in both normoxic and hypoxic cellular environments.

Professor **Denise Rooney** (Maynooth University) concluded the morning session with an *invited talk*, presenting an overview encompassing years of collaborative research across several groups in the Irish bioinorganic community focussing on the antimicrobial activity of silver complexes of phenanthroline derivatives and their potential against bacteria and fungi (such as *C. albicans*). Additionally, recent results with rhenium and iron carbonyl complexes with *N*-heterocycles and their medicinal applications were presented, including their role as CO-releasing molecules.

Flash Presentations: Chair Dr Andrew Phillips

Before lunch, there was an opportunity for seven early career researchers (Figure 1) to present their work in the form of rapid-fire flash presentations. The flash session was sponsored by the Institute of Chemistry of Ireland. Joshua Thorogood was awarded the ICI Flash Prize for his work on Synthetic Magnesium Tetrapyrrole Radicals to understand the mechanisms behind the redox potential of chlorophyll-a in P680.

Poster Session 1

Two poster sessions were included in the Symposium Programme, the first over the lunch break and the second in the mid-afternoon. This was to ensure that adequate time was given to delegates to discuss research with the early-career researchers, make connections, and potentially fuel future collaborations. Posters were presented by Sachidulal Biswas (TCD), Federica Brescia (University of Galway), Agnideep Das (TCD), Clara Evans (Maynooth University), Judit Fodor (TCD), Daniel Gracyzyk (UCD), Sophie Kavanagh & Thomas Rabbitte (UCD), Agnieszka Kawalerska (TU Dublin), Oscar Kelly (TCD), Darragh McHugh (University of Galway), Phillip Morgenfurt (DCU), Joshua Thorogood (TCD), Kaja Turzanska (RCSI), Eleanor Windle (UCD), Karolina Wojtczak (University of Galway) and Clara Zehe (UCD).

Figure 1. Flash presenters: Clara Evans (MU), Joshua Thorogood (TCD), Thomas Rabbitte (UCD) Phillip Morgenfurt (DCU) Federica Bresia (UoG), Eleanor Windle (UCD) and Agnideep Das (TCD);

IBICS Annual General Meeting

As part of the AGM, held after lunch, Prof. Mick Devereaux's term as President ended, and Dr Luca Ronconi from University of Galway was elected the in-coming President of the Society. Prof. Orla Howe (TU Dublin) was elected Vice-President for the coming year. It was also announced that the 8th IBICS Symposium will be held in University College Cork next year, chaired by Dr Christopher Burke. Some members of the IBICS Committee are photographed in Figure 2–3.

Figure 2. Members of the IBICS Committee: Christopher Burke (UCC), Joseph Byrne (UCD), Deirdre Fitzgerald-Hughes (RSCI), Celine Marmion (RCSI), Michael Devereaux (TUD, outgoing President), Bernie Creaven (TUD), Orla Howe (TUD), Luca Ronconi (UoG, incoming President)

Session 2: Chair Professor Susan Quinn

Resuming the scientific programme, Professor **Mathias Senge** (Trinity College Dublin) delivered an *engaging invited talk*, in the style of a court case: "On Trial: The Case of Aluminium Dipyrrinato Photosensitizers", where he made the case for the use of abundant and inexpensive aluminium in *tris*-dipyrrinato complexes for potential photodynamic therapy applications. He

Figure 3. Attendees at Irish Biological Inorganic Chemistry Symposium and Annual General Meeting

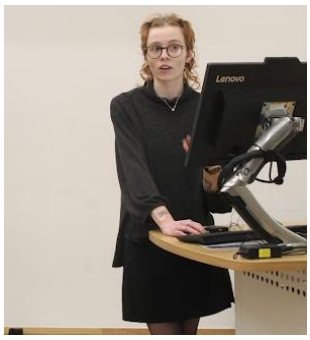
Figure 4. Chairing various sessions of the Symposium, from top left: Professor Michael Devereaux, Dr Joseph Byrne, Dr Luca Ronconi, Dr Andrew Phillips, Professor Susan Quinn, Professor Celine Marmion.

gave a historical overview of "heliotherapy", properties of porphyrins and BODIPY derivatives before describing a library of aluminium compounds, their absorbance and fluorescence with triplet excited state lifetimes with potential for acceptable singlet oxygen production. Prof Senge was pleased to be invited to the meeting as an "outsider" (an organic chemist) and the talk was very well received.

Simon Poole (Andrew Kellett Group, DCU) reported the generation of a new class of 'click' chemistry-derived dinuclear copper(II) artificial metallonuclease. These compounds were designed as new anticancer agents to overcome resistance, causing long-range crosslinking interactions in DNA which circumvent typical DNA adduct repair processes. He presented a library of triazole-linked complexes and detailed the structure-activity relationship study which gave rise to a lead compound with promising selectivity against cancer.

Darren Beirne (Maynooth University) described Pt(IV) pro-drugs based on sunitinib derivatives of FDA-approved Pt(II) metallodrugs (cisplatin, oxaliplatin and carboplatin) and their potential for overcoming limitations of existing chemotherapies. These compounds were designed to target tyrosine kinases, which play a major role in cell regulation pathways. The presentation included promising preliminary anti-cancer activity against several cell lines.

Lewis More O'Ferrall (Groups of Darren Griffith, RCSI and Christine O'Connor, TU Dublin), told the Symposium about developments in gallium(III) siderophore derivatives, which work as a metallo-Trojan horse strategy to tackle *Aspergillus fumigatus* and take advantage of microbes' high demand for Fe(III), highlighting the issue of antimicrobial resistance and persistent lower respiratory tract infections. He described their new treatment and its various formulations suitable for lung delivery, along with the Ga(III) complex selective toxicity to *A. fumigatus*. These treatments, non toxic to human cells, were more effective than simple Ga(III) complexes.



Ella O'Sullivan (Orla Howe Group, TU Dublin) began her talk, highlighting the unprecedented increase in cancer incidence and detailing anti-cancer potential of a range of Cu(II), Mn(II) and Ag(I) complexes incorporating bridging dicarboxylate and chelating 1,10-phenanthroline ligands. Her talk focussed on elucidating differing cytotoxic mechanisms of the complexes against various cell lines, with some demonstrating antioxidant effects and others generating intracellular ROS. The role of apoptosis in regulated cell death caused by the complexes was profiled by various methods.

Poster Session 2

This session was sponsored by the Royal Society of Chemistry Republic of Ireland Local Section. Over the course of an hour, the poster presenters mingled with other delegates (Figure 6), explaining and discussing their work while the judges made their decisions about the prize winners.

Session 3: Professor Celine Marmion

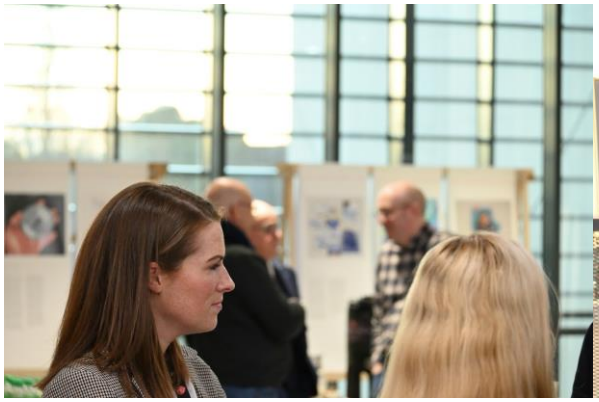
Dr **Neville Murphy** (Pau Farras Group, University of Galway/CÚRAM Centre for Medical Device Research) described investigations into intracellular behaviour of metallacarboranes *via* the lens of stimulated Raman spectroscopy (SRS). This work exploits Raman signals of the B-H stretch in the spectrum's 'cell-silent' window, making SRS an ideal candidate for label-free tracking of metallacarboranes and their toxicity. This was contrasted with existing fluorescent multispectral imaging that alters imaging subjects through labelling.

Figure 5. Presentation of gifts to Plenary Speakers: Prof Ramon Vilar and Prof Petra Heffeter

Figure 6. Various delegates at the Poster Sessions (continued overleaf)









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Professor **Petra Heffeter** (Medical University of Vienna, Austria) concluded the second session with a plenary talk where she introduced her group's development of new strategies to overcome the therapeutic limitations of inorganic anticancer drugs, such as resistance and adverse effects. Characteristic conditions of the malignant tumour cell need to be exploited to understand, tune and improve specificity of treatments. She highlighted several key examples of drugs exploiting new strategies. Inhibitors of epidermal growth factor receptors were described, which are activated by cobalt-based prodrugs in hypoxic tumour conditions. Several albumin-targeted therapeutics exploit several conditions, including tumours' enhanced nutrient supply, one of which is in Phase II clinical trials. Preclinical data of Pt(IV) prodrugs were also described in a wide-ranging discussion of an exciting aspect of rational biological inorganic chemistry research.

At the end of the third session, **Dr Amir Abdo** (University of Galway/CÚRAM Centre for Medical Device Research) delivered his IBICS Postgraduate Gold Medal 2023 Award Lecture. Dr Abdo gave an excellent talk on metalloporphyrins and their potential as nitric oxide scavengers in the treatment of breast cancer.

Prizes

The **IBICS Postgraduate Gold Medal** is awarded annually to one PhD student who has distinguished themselves across a range of criteria throughout their PhD with a focus on research performance, achievements and impact in the field of medicinal and biological inorganic chemistry. Reviewing applications for this competitive award is a highlight of the year for the Society, allowing an opportunity to recognise the breadth of high-achieving final year PhD students or recent graduates whose work aligns to the interdisciplinary aims of IBICS, working across the island of Ireland. The selection committee noted the very high standard of the competition, and before announcing the award they took the opportunity to award **certificates of commendation** to four other applicants for the gold medal: Karolina Wojtczak (University of Galway), Dr Mark Stitch (UCD), Dr Neville Murphy (University of Galway) and Paul O'Dowd (RCSI). This year's gold medal was awarded to **Dr Amir Abdo** from University of Galway/CÚRAM Centre for Medical Device Research. Amir obtained his MSc in Biological and Bioprocess Engineering from the University of Sheffield (UK) and MSc in Biochemistry from Helwan University (Egypt). After working as a research assistant in radiation chemistry at the National Centre for Radiation Research and Technology (Egypt), he embarked on his doctoral studies at the University of Galway/CÚRAM under the guidance of Professor Abhay Pandit, funded by the College of Engineering and Informatics Scholarship Scheme, and supported by Dr Pau Farràs and Dr Sharon Glynn. Recently, Amir was awarded the Irish Research Council's (IRC) Postdoctoral Fellowship to continue his work on nitric oxide-scavenging compounds and materials for treatment of breast cancer at the University of Galway/CÚRAM.

Figure 7. Photo of Prize Winners, from left: Eleanor Windle (UCD), Joshua Thorogood (TCD), and Ella O'Sullivan (TUD) with Professor Michael Devereaux

Before closing the Symposium, outgoing **IBICS President Professor Michael Devereux** announced the prize-winners selected by judges from the IBICS community during the day. Prizes were awarded to the best poster, best flash presentation and best oral presentation (by a graduate student). The oral presentation prize was sponsored by **IBICS**, the flash prize was sponsored by silver-tier sponsor, the **Institute of Chemistry of Ireland**, and the poster prize was sponsored by **Scientific Laboratory Supplies** (SLS). All three prize-winners (Figure 3) were presented with a copy of *"Targeted Metallo-Drugs: Design, Development, and Modes of Action"* (Edited by Etelka Farkas & Celine J. Marmion) courtesy of the kind sponsorship of CRC Press – Taylor & Francis Group.

The prize-winners were as follows:

- **IBICS Poster Prize:** Ella O'Sullivan (TU Dublin)
- **ICI Flash Prize:** Joshua Thorogood (TCD)
- **SLS Poster Prize:** Eleanor Windle (UCD)

Figure 8. Local Organising Committee at UCD: Prof. Susan Quinn, Assist. Prof. Joseph Byrne, Sophie Kavanagh, Assist. Prof. Andrew Phillips.

Concluding Remarks

After the prizes, and thanks to all the presenters Prof Devereaux brought the formal scientific proceedings to a close. **Dr Joseph Byrne**, Chair of the Local Organising Committee thanked his co-organisers (Figure 8), chairs (Figure 4) and the IBICS Committee (especially Professors Devereaux and Howe) for their support during the year preparing the meeting, the sponsors who helped fund the event and exhibited throughout the symposium, and all the postgraduate students at UCD who had contributed on the success of the day in preparing registration, advertising and keeping things running through the day.

The day concluded with a wine-reception on the balcony of UCD Village, where postgraduate students, academics and other researchers spent the evening networking and discussing the interesting research that had been presented during the course of the Symposium. Next year's event will take place in University College Cork. Details of symposia past and future, as well as details on other activities and membership of IBICS can be found on the Society's website www.ibics.ie.

Acknowledgements

The Symposium was made possible by the financial support of several generous sponsors. Support from scholarly organisations was offered by the **Royal Society of Chemistry Republic of Ireland Local Section** and the **Institute of Chemistry of Ireland**. Commercial sponsors who exhibited on the day were **Mason Technologies**, **Merck**, **Accuscience** and **GPE/Julabo**, all of whom are frequent supporters of scientific meetings in Ireland. The Organising Committee are grateful to the IBICS Committee, particularly Mick Devereaux and Orla Howe for organisational support during the preparation of the Symposium and UCD School of Chemistry colleagues for support.

Previous Events in this Series

Programmes of the previous six IBICS Symposia are available at: http://ibics.ie/ibics-symposia

Irish Chemical Events

Young Chemists for Change: Advancing Equity in Chemistry (YCFC-2024)

Report by: Almudena Moreno-Borrallo[a], Mary Flood[b], Francesca Adami[b], Wiktoria Brytan[c]

Event Date: 30/05/2024 – 31/05/2024

Venue: O'Brien Centre for Science,University College Dublin

Event Type: Conference

Report received: 29/11/2024

DOI: 10.5281/zenodo.14276155

http://zenodo.org/communities/ice

Organising Committee: Equality, Diversity & Inclusion (EDI) Committee of the Institute of Chemistry of Ireland Young Chemists' Network (ICI-YCN)

Affiliations: [a] Trinity College Dublin; [b] University College Dublin; [c] University of Limerick

Organisation: ICI Young Chemists' Network (ICI-YCN)

Event Sponsors

Royal Society of Chemistry Inclusion & Diversity Fund [Fund 229717881], Royal Society of Chemistry Republic of Ireland Local Section, Institute of Chemistry of Ireland, UCD School of Chemistry, UCD College of Science, UCD Equality Diversity and Inclusion, ThermoFisher Scientific and Scientific Laboratory Supplies.

Summary

The very first 'Young Chemists for Change (YCFC)' conference was successfully held at University College Dublin on May 30th and 31st of this year, organised by the EDI committee of the ICI-Young Chemists' Network with over 80 attendees and speakers from diverse backgrounds and expertise.

The event hosted a poster session as well as twelve oral presentations, highlighting the opportunity to disseminate research through an EDI-focused lens. Keynote speakers at the event included: Prof. Andrew Nortcliffe (University of Nottingham, UK), who also hosted an interactive workshop with a focus on group discussion and reflection on EDI topics; Dr. Marianne Bore Harr (University College Dublin), and Dr. Niamh O'Mahoney (University College Cork).

Attendees

The event had a total of 85 registered attendees, including postgraduate students, post-doctoral researchers and academic staff. University College Dublin, University of Limerick, Trinity College Dublin, Queen's University Belfast, Maynooth University and Atlantic Technological University, Sligo, were all represented at the event.

Target audience: Postgraduates, Early Career (Academia), Academics.

Programme & Proceedings

The agenda of the event (**Figure 1)** featured a variety of chemistry-related and EDI-focused topics, with keynote speakers from Ireland and the UK, as well as a number of oral presentations from PhD researchers across the country.

Agenda

Thursday, May 30th, O'Brien Centre for Science (UCD)

9:00 Registration with Tea & Coffee

10:00 Meeting welcome - *Moore Auditorium*

10:30 Keynote Speaker: Andrew Nortcliffe – *Queer Thinking, Queer Talking: Reflections on EDI Leadership*

11:00 Oral presentations:

Muhammad Zain Bin Amjad – *Synergistic Integration of Silicon-Nanowires on Graphite Substrate for High Performance Lithium-Ion Battery Anodes*

Keerthi M. Nair – *Clear Waters Ahead: Revolutionizing Water Treatment for Equality and Inclusion*

11:30 Break

12:00 Keynote speaker: Marianne Haarr – *How can a chemist do EDI, and does it matter?*

12:30 Oral presentations:

Louis-Antoine Barel – *Strength In Unity: Embracing Diversity And Inclusion On The Research Path*

Misbah Mustaq – *Sustainable Lignin-Based 3D Porous Carbon Nanofibers as a Na-ion Battery Anode*

13:00 Lunch

14:00 Oral presentations:

Celine Erkey – *Click and Cure: Tailored Building Blocks for Improved Therapeutics*

Karlijn Hertsig – *Bridging the Gap from Quantum Dots to Carbon Dots for Societal Benefit*

14:30 Poster reception

16:30 Workshop: Dr. Andrew Nortcliffe, University of Nottingham – *Beyond the Mask: Cultivating Authentic Behaviours for an Inclusive Chemical Landscape - ALE Room*

18:00 Evening event & ChemSoc Pub Quiz – *UCD Village*

Friday, May 31st, O'Brien Centre for Science (UCD)

9:30 Keynote speaker: Marina Resmini – *The role of inclusion and diversity in influencing research and teaching culture: an academic perspective - Moore Auditorium*

10:00 Oral presentations:

Zishan Li – *Controlled Polymerization Of Acrylamide Monomers*

Francesca Adami - *My Efforts Matter, a PhD Journey*

10:30 Break

11:00 Keynote speaker: Niamh O'Mahoney – *One Size Does Not Fit All: Adapting to the Ever-evolving Chemistry Student*

11:30 Closing remarks & oral presentation/poster winners announced

13:00 End of the 1st Irish Young Chemists' EDI conference

Figure 1. Event agenda. Keynote speakers are highlighted in bold. Oral presentations were given by PhD researchers from various institutions across Ireland.

The poster sessions at YCFC **(Figure 2)** allowed attendees to disseminate their research to the wider scientific community, foster valuable knowledge exchange and network with peers, academic staff and industry professionals. This YCFC event also offered the unique opportunity for early career researchers to share their experiences in EDI and its promotion within the chemical sciences.

Figure 2. Poster Session at YCFC.

Alongside these sessions, Professor Andrew Nortcliffe of University of Nottingham provided a highly engaging workshop titled 'Beyond the Mask: Cultivating Authentic Behaviours for an Inclusive Chemical Landscape' **(Figure 3)**. The purpose of this workshop was to provide a safe environment for attendees to engage in round-table discussions on a variety of EDI-related topics, such as open communication, active listening, and understanding what it means to be your authentic self. This workshop also provided a shared electronic platform for attendees to submit anonymous opinions in order to gain a deeper understanding and appreciation for diverse perspectives. Additional topics explored included championing of allyship, as well as addressing learned behaviours, micro-aggressions and bias within the chemistry community.

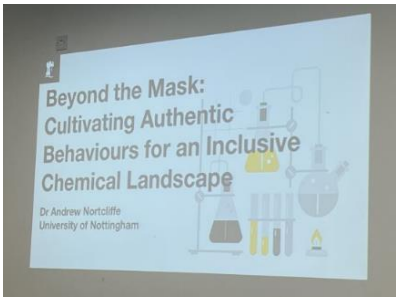


Figure 3. YCFC Workshop provided by Prof. Andrew Nortcliffe (University of Nottingham).

Prizes

Attendees had the opportunity to vote for Best Oral and Poster presentations by scanning a QR code made available throughout the event.

Mark Moloney (ThermoFisher Scientific) presented the 1st Place prize in the Oral Presentations to PhD student Celine Erkey (University College Dublin) for her presentation titled 'Click and Cure: Tailored Building Blocks for Improved Therapeutics'.

Pictured: Mark Moloney (ThermoFisher Scientific) and Celine Erkey (UCD).

Wiktoria Brytan (ICI-YCN) handed the 2nd Place Oral Presentation prize to PhD student Muhammad Zain Bin Amjad (University of Limerick) for his talk entitled 'Synergistic Integration of Silicon-Nanowires on Graphite Substrate for High Performance Lithium-Ion Battery Anodes'.

Pictured: Wiktoria Brytan (ICI-YCN) and Muhammad Zain Bin Amjad (UL).

Almudena Moreno-Borrallo (ICI-YCN) handed the Best Poster award to PhD student Christine Coffey (University College Dublin) for her work 'Towards Phosphenium Cations for Catalysis'.

Pictured: Almudena Moreno-Borrallo (ICI-YCN) and Christine Coffey (UCD).

Feedback from Attendees at YCFC

"Even at the poster session, I felt like I could ask 'the stupid questions' that I haven't really dared to ask before, and I learnt a lot!"

"I think this workshop allows for all voices to be heard, and for important topics to be discussed."

"I really enjoyed the discussion surrounding how we need to be our authentic selves and find a way to not mask how we are feeling and really be honest with ourselves and others."

"[...] the opportunity to discuss ideas and get others' views in a safe environment."

"I loved the keynote speakers, especially Marianne and Andrew since I found them very relatable and very engaging; I also liked the interactive workshop session."

"[...] the discussions, because I got to learn a lot about other people's experiences and views."

"Talking and discussing together with other people you wouldn't normally chat to on the regular. Broadened my mind more."

"The interactivity and opportunity to talk to others about EDI and be guided by an experienced EDI practitioner"

Pictured: Organising Committee of YCFC with Keynote Speakers (L to R): Prof. Andrew Nortcliffe (UoN), Almudena Moreno-Borrallo (TCD), Wiktoria Brytan (UL), Mary Flood (UCD), Dr. Niamh O'Mahoney (UCC), Dr. Marianne Haarr (UCD), Francesca Adami (UCD).

Acknowledgements

Thanks to the Royal Society of Chemistry Inclusion & Diversity Fund for making this event possible.

Thanks to the Royal Society of Chemistry Ireland Local Section, the Institute of Chemistry of Ireland, the UCD School of Chemistry, the UCD College of Science and UCD Equality Diversity and Inclusion for further funding this event.

Special thanks to ThermoFisher and SLS for sponsoring this event and providing oral presentation and poster prizes.

Thanks to KSG and UCD FoodHall for providing the food and drinks, and to UCD ChemSoc for organising the social event.

Thanks to the ICI-YCN, Joseph Byrne, Elaine O'Reilly, James Sullivan and Susan Wilson for their assistance in the organisation of this event.

Research Ethics

Approval for collection of data and comments from attendees was approved as a low risk study by UCD's Human Research Ethics Committee – Sciences, with research ethics reference: LS-C-24-202-Adami-Byrne.

Irish Chemical Events

Ceimic as Gaeilge 2024 – Imeacht Seachtain na Gaeilge

Report by: Joseph P. Byrne

Event Date: 01/03/2024

Venue: Ollscoil na hÉireann, 49 Cearnóg Mhuirfeann

Event Type: Conference

Report received: 31/03/2025

DOI: 10.5281/zenodo.15323827

http://zenodo.org/communities/ice/

Organising Committee: Joseph P. Byrne,[a] Cathal Ó Ceallaigh,[b]

[a] Scoil na Ceimice, Coláiste na hOllscoile, Baile Átha Cliath; [b] Scoil na Ceimice, Ollscoil na Ríonna Béal Feirste

Organisation: ICI Young Chemists Network/Líonra na gCeimiceoirí Óga ICÉ

Event Sponsors

Institute of Chemistry of Ireland, National University of Ireland

Achoimre

Ar 1 Márta, le tús a chur le Seachtain na Gaeilge, bhí imeacht eagraithe ag **Líonra na gCeimiceoirí Óga ICÉ** (LCÓ) chun deis a thabhairt do chemiceoirí na tíre a gcuid taighde a phlé trí mheáin na Gaeilge. Bhí *Ceimic as Gaeilge 2024* mar an gcéad imeacht dá short riaimh.

Bhí *Ceimic as Gaeilge* comh-eagraithe ag Leas-Cathaoirleach LCÓ Cathal Ó Ceallaigh (Ollscoil na Ríonna, Béal Feirste) agus Comhairleoir an Dr Iósaf Ó Beirne (Coláiste na hOllscoile, Baile Átha Cliath), le tacaíocht ó Choiste an LCÓ uile, ach go háirithe Cathaoirleach Seán Byrne. Tá míle buíochas de dhíth ag foireann Ollscoil na hÉireann ag 49 Cearnóg Mhuirfeann Thoir a chuir fáilte fliúirseach agus tacaíocht roimh an imeacht, ach go háirithe Cláraitheoir na hOllscoile an Dr Patrick O'Leary.

Lucht Freastail / Attendees

Bhí thart ar 30 i láthair. Approximately 30 attended.

Target audience: academics, postgraduates, ECR (academia), members of the public, policy-makers

Summary

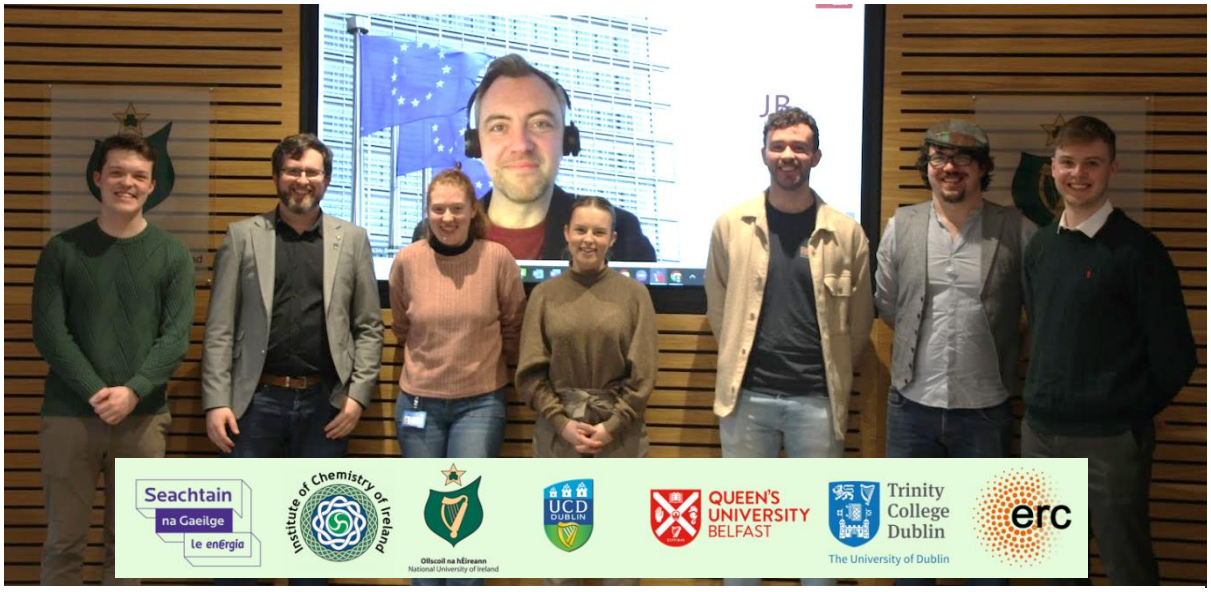
On the 1st of March, to begin Seachtain na Gaeilge, the ICI Young Chemists Network (YCN) organised an event giving opportunities to the country's chemists to discuss their research in the Irish language. Ceimic as Gaeilge 2024 was the first ever event of its type.

Ceimic as Gaeilge was co-organised by YCN Vice-Chair Cathal Kelly (Queens University Belfast) and Advisor Dr Joseph Byrne (UCD), with support from the rest of the YCN Committee, in particular Chair Seán Byrne. Sincere appreciation also to the team of the National University of Ireland at 49 Merrion Square East who heartily welcomed and supported the event, especially Registrar of the NUI, Dr Patrick O'Leary.

Clár / Programme

Table 1. Clár ama an lae. The timetable of the day.

Time/Am		Cathaoirleach
13:30	**Fáilte ┐ Cuid 1**	Cathal Ó Ceallaigh (QUB)
14:45	**Sos Caife**	
15:00	**Cuid 2 ┐ Comhrá**	Iósaf Ó Beirne (UCD)



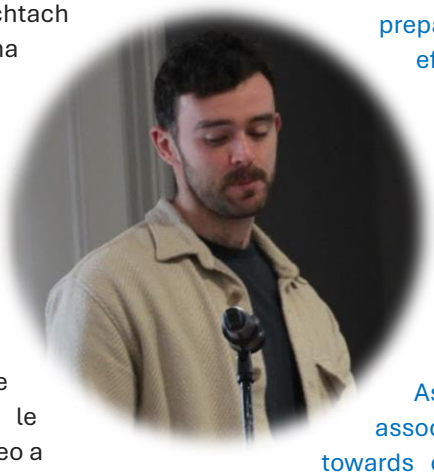
Íomhá 1. Na cainteoirí uile a ghlac páirt i gCeimic as Gaeilge 2024. *All of the speakers who participated in Ceimic as Gaeilge 2024.*

Imeachtaí

D'oscail Cathal Ó Ceallaigh imeachtaí an lae le fáilte a chuir roimh na aoí a tháinig trín sneachta gan choinne a thit ar maidin. Faraor theip ar cúpla daoine freastail ar an imeacht i mbliana mar gheall ar iompair poiblí teoranta an lae.

Fáilte ┐ Cuid 1

Chuir an Dr **Patrick O'Leary**, Cláraitheoir OÉ, fáilte foirmiúil roimh na toiscairí chuig an ionaid. Dúirt sé go raibh lúchair ar OÉ an imeacht a óstáil, ag cur leis "Cuireann ár bplean straitéiseach de cheangal orainn dul chun cinn a dhéanamh lenár gcuid cumas sa Ghaeilge agus le tacú le imeachtaí mar seo." Go dtí cúpla bliain ó shin, bhí an Dr O'Leary ina léachtóir ceimice ag Ollscoil na Gaillimhe, agus ghlac sé an deis a bheith páirteach sa chomhdháil trí chur i láthair taighde ar shintéis na gcatalaíoch nua. Úsáidtear na catalaíochí seo in imoibrithe atá tábhachtach d'ullmhú cógaisíochta. Déanann siad na imoibriú níos éifeachtaí agus níos iontaofa.



Chuir **Maitiú Ó Ciarnáin** *(COBÁC)* ó Ghrúpa Paul Evans tús le léirithe na mic léinn iarchéime, á phlé a chuid taithe taighde sa cheimic orgánach. Tá *N*-heitrichiorcail sáithithe mar cheann de na móitíf structúrach is comónta i ndrugaí agus i dtáirgí nádurtha. De thoradh seo tá an-tábhacht ag baint le forbairt imoibrithe nua i dtreo na móilíní seo a

Proceedings

Cathal Kelly opened the day's proceedings by welcoming all the attendees who a come through the unexpected snow that fell that morning. Unfortunately, some people were unable to attend due to the day's limited public transport.

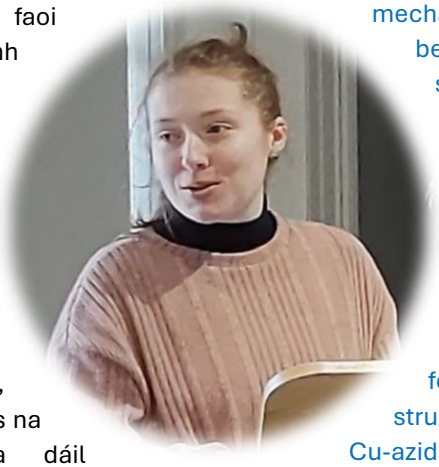
Welcome and Part 1

Dr **Patrick O'Leary**, Registrar of NUI, formally welcomed delegates to the venue. He said NUI was delighted to host the event, adding "Our strategic plan commits us to developing our abilities in Irish and to supporting events like this." Until a few years ago, Dr O'Leary was a chemistry lecturer in University of Galway, and he took the opportunity to participate in the conference, presenting research on the synthesis of new catalysts. These catalysts are used in reactions that are important for pharmaceutical preparation. They make the reactions more efficient and reliable.

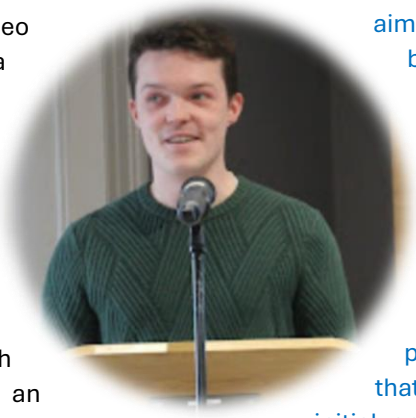
Matthew Kiernan *(UCD)* from the Paul Evans Group put a start to the postgraduate student talks, discussing his experience with organic chemistry research. Saturated *N*-heterocycles are some of the most common structural motifs in drugs and natural products. As a results of this, great importance is associated with developing new reactions towards creating these molecules in effective

cruthú i mbealach éifeachtúil agus roghnaitheach. Rinne Maitiú cur síos ar iarrachtaí s'aige agus a chomhoibrí chun teacht ar dhá imoibriú nua; (1) Sintéis neamh-shiméadrach pioróilidíní trí chatalú tiacarbamáite; agus (2) Sintéis raicéamach aiseitidíní trí úsáid heacseafluairiseaprópánól.

Labhair **Niamh Ní Shé** ó Ghrúpa Gunnlaugsson *(CnaT)* faoin a cuid oibre le "Móilíní atá idirghaolmhar go meicniúil agus Micreascópacht", ach go háirithe caitéineáin agus rothacsáin. Labhair sí faoin gceimic formhóilíneach, steiréiceimic mheicniúil agus stair na ceimice seo agus na móilíní atá faoi thaighde aici. Thaispeán Niamh aidhmeanna a cuid tionscadail, ina measc úsáid compléisc lantanóidigh mar stopadóirí rothacsáine, agus cruthú braitheoirí nó ghéataí loighic le rothacsáin bunaithe ar **btp** (2,6-bis(1,2,3-tríasól-4-il)piridín).



Úsáideann a grúpa taighde an moitíf **btp** mar theimpléad ar na struchtúir móilíneacha seo. Phléigh sí an sintéis, an iomoibriú 'clic' coparchatalaithe agus na turgnamh a bharrfheabhsaigh na dáil iomoibrithe chun macraichiogal **btp** a dhéanamh go roghnaitheach. Thaispeáin Niamh íomhánna leictreonmhicreascóip scanacháin a léirígh na struchtúir éagsúla cruthaithe le úsáid tuaslagóirí difriúil. Chuir an chuid seo den chaint béim ar féidireacht na móilíní seo féinchóimeáil a dhéanamh. Mar achoimre, bhí an caint seo faoin na haidhmeanna agus scóip a bhaineann lena cuid oibre, an sintéis a úsáidtear agus na n-uirlis anailíse a úsáidtear sa thionscadal.



Cuireadh tús leis an gcur i láthair ag **Eoghan Ó Curnáin** leis an taighde ar lotnaidicídí foirmlithe le micreacapsúil in-bhithmhillte, a rinneadh ar shocrúchán le *Life Scientific*. Ina dhiaidh sin, pléadh sintéis na substráite agus barrfheabhsú an imoibrithe DAAA Pd-chatalaithe de chomhdhúil heitrea-fáinneach ina bhfuil sulfair acu, atá ar siúil aige i nGrúpa Uí Ghadhra *(COBÁC)*. Ar deireadh, soláthraíodh cúlra agus plean an tionscadail chun imoibriú Suzuki neamh-shiméadrach a bhaint amach, agus é seo a chur i bhfeidhmin in ullmhú liogann-*P,N* ciriúla i leith na haise.

and selective ways. Matthew described the efforts he and his team have made to come up with two new reactions; (1) Asymmetric synthesis of pyrolidines through thio-carbamate catalysis; and (2) Racemic synthesis of azetidines through the use of hexafluoroisoproanol.

Niamh O'Shea from the Gunnlaugsson Group *(TCD)* was talking about her work with "Mechanically Interlocking Molecules and Microscopy", especially catenanes and rotaxanes. She spoke about supramolecular chemistry, mechanostereochemistry and the history behind this chemistry and the molecules she is researching. Niamh showed the aims of her Project being the use of lanthanides as stoppers for **btp** (2,6-bis(1,2,3-triazol-4-yl)pyridine) rotaxanes and the aims for the creation of sensors or logic gates with the rotaxanes.

Her research group uses the **btp** motif for the templating of these molecular structures. She discussed the synthesis, Cu-azide click reactions and experiments to optimise reaction conditions to selectively produce **btp** macrocycles. Niamh displayed Scanning Electron Microscopy Images and the different structures created when you use different solvents. This part of the talk highlighted these molecules' ability to self-assemble. In summary, the talk was about the aims and scope of the work, the synthesis being deployed, and the analytical instruments being used in the project.

Eoghan Courtney's presentation began with an overview of the research into developing a biodegradable microcapsule pesticide product, which he did on placement in *Life Scientific*. Following that, the synthesis of the substrate and the initial optimization of the Pd-catalyzed DAAA reaction of sulfur-containing heterocycles that is on-going in the Guiry Group *(UCD)* were discussed. Lastly, the background and project outline for achieving asymmetric Suzuki reaction in the preparation of axially chiral *P,N*-ligands were provided.

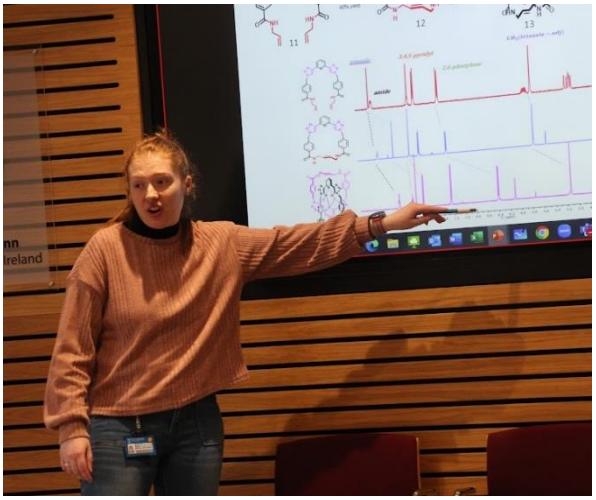
Labhair An Dr **Iósaf Ó Beirne** *(COBÁC)* faoin taighde atá ar siúil sa ghrúpa ‘s aige le coimpléisc miotail maisithe le carbaihiodráite. I gcomhthéacs an dúshlán frithsheasmhachta in aghaidh ábhar frithmhiocróbach, tá siad ag iarradh dhíriú ar pataiginí i mbealach nua, ina bhaintear feidhm as prótéiní áirthe a nascann le carbaihiodráite (ar a ghlaotar ‘leictiní’). Rinne Joe cur síos ar dhá sort glicea-bhraisle miotal-lárnach, bunaithe ar scafall **btp** (2,6-bis(1,2,3-tríasól-4-il)piridín) nó **dpa** (2,6-décarbocsaipiridín). Bhí éiféacht frith-bhithsceo ag coimpléisc **btp** Ru(II) nach raibh le fáil leis an liogann amháin - in aineoinn go raibh siad neamh-bhaictéiriciídeach. Rinneadh réimse coimpléisc **dpa** le miotail éagsúla, ach bhí an éifeacht is mó frith-*Pseudomonas aeruginosa* ag coimpléisc eorapiaim(III). Léirigh sé fresin an féidireacht a bhí ag coimpléisc galachtósíde Tb(III) (le spáisire oiriúnach) mar braiteora leictiní lonnrachta, a éirigh níos gile nuair a bhí leictin a nascann galachtós ann.

Gabh an Dr Ó Beirne buíochas leis an lucht a tháinigh inniu agus tharraing sé aird ar saibhreas an phlé a bhí ar siúil trí cheisteanna agus freagra suimiúla i ndiadh gach léiriú. Soláthraigh sé fiúntas an lae. Leis an méid sin ráite, ghlacadh sos caife agus cainte neamh-fhormúil.

Dr **Joseph Byrne** *(UCD)* spoke about the research that is underway in his group with carbohydrate-functionalised metal complexes. In the context of the challenge of antimicrobial resistance (AMR), they are trying to target pathogens in a new way, making use of specific carbohydrate-binding proteins (called ‘lectins’). Joe described two kinds of metal-centred glyco-cluster, based on the scaffolds **btp** (2,6-bis(1,2,3-triazol-4-yl)pyridine) or **dpa** (dipicolinic acid). Ru(II) **btp** complexes had an anti-biofilm effect that was not observed with the ligand alone - despite not benign bactericidal. A range of **dpa** complexes with various metals were made, but the europium(III) complexes had the largest anti-*Pseudomonas aeruginosa* effect. He also demonstrated the capability of galactoside Tb(III) complexes (with appropriate spacer) as luminescent lectin sensors, that became brighter when a galactose-binding lectin was present.

Dr Byrne thanked the attendees for coming today and drew attention to the wealth of discussion that was taking place through interesting questions and answers after each talk. This demonstrated the value of the day. With that said, a break for coffee and informal discussion took place.

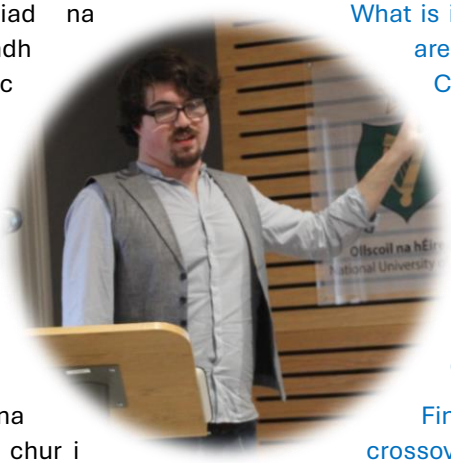
Íomhá 2. (ar chlé) Sneachta an lae ar doras Olscoill na hÉireann; (ar dheis) An Dr Patrick O’Leary, Cláraitheoir OÉ leis an Dr Iósaf Ó Beirne agus Cathal Ó Ceallaigh a d’eagraigh an imeacht. *(left) The day’s snowfall on the door of the National University of Ireland; (right) Dr Patrick O’Leary, Registrar of the NUI with Dr Joseph Byrne and Cathal Kelly who organised the event.*



Cuid 2

Thosaigh an dara seisiún leis an cainteoir a tháinig ón áit is faide don imeacht inniu. Rinne **Cathal Ó Ceallaigh** *(CnaRBF)* cur síos ar a thaighde i leachtanna scagacha. Léiríú go gcrúthaíonn scagacht méadú ar ionsú gáis na leachtanna seo. Aimsíú nach seo an cás nuair a n-úsáidtear CO_2. Cuireadh an locht ar "spás curtha amú", coincheap nua i leachtanna scagacha. Cruthaíonn mórchóir steireach an óstmhóilín spás nach úsáideann na mhóilíní gáis, agus cruthaíonn seo laghdu ar an ionsú gáis. Rinneadh cur síos ar bealaí a d'fhéadfadh an spás curtha amú seo a laghdú: trí méid na móilíní tuaslagóirí a laghdú agus scagacht éifeachtacht an óstmhóilín a mhéadú.

An teideal a bhí ag léiriú **Eoin Mac Aoidh Pasquetti** *(COBÁC)*, ó Ghrúpa Grace Morgan, ná “Saol Maighnéadach an Adaimh: Réamhrá ar Aistriú Guairne”. Deineadh plé ar aistriú guairne; Cén rud é?, Conas a scrúdaítear?, is cad iad na feidhmeanna a bhaineann leis? Deineadh cur síos bunúsach ar Cheimic Chomordánaithe is ar an slí a éiríonn aistriú amach as an mbaint atá ann idir stát guairne an adaimh agus an neart atá sa réimse liogainn. Deineadh plé ar na teicnící is tábhachtaí a bhaineann le aistriú guairne agus ar an eolas is féidir a bhaint astu.



Ar deireadh, tugadh samplaí dosna hábhair gurbh fhéidir aistriú guairne a chur i bhfeidhm iontu agus ábhair go bhfuil sé i bhfeidhm iontu cheana féin.

Labhair **Aoibheann Ní Chonchubhair** (*COBÁC*) ó Ghrúpa Uí Ghadhra ar fiosrúchán ar an imoibriú Diels-Alder neamhshiméadreach. Is grúpa sintéis neamhshiméadreach é an Grúpa Uí Ghadhra, agus sa chur i láthair seo bhíodar ag díriú ar an úsáid do chuiditheoir ciriúlacht mar stratéis chun neamhshiméadreacht a chruthú. Ag úsáid an imoibriú dé-éin a bhí dearrtha acu cheana féin i gcomhair móilíní nítrigin, agus le spreagadh ón obair Evans i 1984, d'úsáidtear an imoibriú sin chun dé-éin a chur ar an chuiditheoir ciriúlacht, in ionad ar an dé-éinifileach.

Part 2

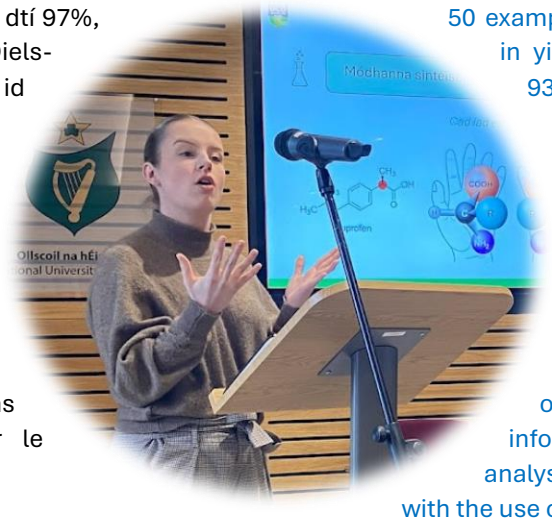
The second session began with the speaker who had traveled the furthest for today's event. **Cathal Kelly** *(QUB)* described his research into porous liquids. Porous liquids normally show enhanced gas uptakes. It was highlighted how this wasn't the case when CO2 was employed as the gas being absorbed. This was blamed on "wasted space", a new concept in porous liquids. The steric bulk of the host molecules creates a space which gas molecules don't occupy which leads to a reduction in the overall gas uptake. Different ways of reducing this wasted space were described: reducing the size of the solvent molecules and increasing the effective porosity of the host molecules.

The title of the talk presented by **Eoin McGee Pasquetti** *(UCD)* from the Group of Grace Morgan was “The Magnetic Life of the atom: Introduction to Spin Crossover”. The topic of spin exchange was discussed; What is it? How can it be examined? And what are its applications? A basic description of Cooridination Chemistry was given, and of the manner that crossover gets out of the link between the spin state of the atom and the strength that is in a range of ligands. Important techniques related to spin crossover, and on the information that may be gleaned from them, was also discussed.

Finally, examples of subjects in which spin crossover could be utilised as well as areas where they are already in use.

Aoibheann O'Connor *(UCD)* from the Guiry Group spoke about the investigation on the asymmetric Diels-Alder reaction. The Guiry group is an asymmetric synthesis group, and this presentation was directed on their use of chiral auxiliaries as a strategy for inducing asymmetry. Using a previously designed dienylation reaction for nitrogen containing molecules, and drawing on inspiration from the work of Evans in 1984, they used this same dienylation reaction to install a diene on the chiral auxiliary, instead of installing a dienophile on it. They have prepared 12 examples of the diene with the

Chruthaítear thart ar 12 shampla don dé-éin le cuiditheoir ciriúlacht le toradh suas go dtí 97%, níos mó ná 50 shampla don táirge Diels-Alder le toradh suas go dtí 70% agus id suas go dtí 93:7, agus 5 shample don tárige gan an cuiditheoir ciriúlacht le toradh suas go dtí 81% agus ie suas go dtí 92%. D'éirigh leo structúr criostail a bhaint amach don dé-éin, dos na tháirge DA agus don táirge gan an cuiditheoir ciriúlacht. Bhíodar in ann eolas cruinn faoin structúr agus neamhshiméadrach tríd an córas anailíse seo, nach fhéadfaí stadéir le anailís AMN in aonar.



chiral auxiliary with yields up to 97%, more than 50 examples of the Diels-Alder product in yields up to 70% and dr up to 93:7, and 5 examples of the product without the chiral auxiliary in yields up to 81% and ee up to 92%. They accessed XRD structures of the dienes, the Diels-Alder products and the compounds without the chiral auxiliary. They could obtain crucial structural information from this method of analysis that would not be possible with the use of NMR analysis alone.

Rinne **An Dr. Gearóid Ó Maille** *(CET)*, a bhí ag glacadh páirt ón mBruiséil ar MS Teams, cur síos ar a chosán gairme féin, ón saotharlann go ról mar Oifigeach Eolaíochta sa gCoimisiún Eorpach. Thug sé eolas ar dheiseanna maoinithe do thaighdeoirí faoin gClár Réime "Fís Eorpach", le béim ar chlár na Comhairle Eorpaí um Thaighde (CET). Is e an CET príomhmhaoinitheoir an Chomisiún Eorpaí do thaighde ar thús cadhnaíochta, agus tá raon deontais curtha ar fáil do eolaithe ag céimeanna gairme difriúla.

Tugadh chun cuimhne freisin an nasc láidir a bhí idir ceimic agus an Ghaeilge in Ollscoil na Gaillimhe: mar shampla, scríobh an réabhlóidí agus an t-ollamh clúiteach Thomas Dillon (ceann scoile ó 1919), an chéad leabhar ceimice i nGaeilge. Lean an meas seo ar ár dteanga sna glúnta a lean é: rinne na ceannairí scoile, an tOll. Proinsias Ó Colla, an tOll. Seán Ó Cinnéide agus an tOll. Ristéard N. de Buitléir, gan dearmad a dhéanamh ar na Oll Breandán Ó Cochláin, a gcion féin go dúthrachtach leis an nGaeilge a choinneáil beo sa gceimic. Labhair Gearóid ar an ádh a bhí air go raibh cuid mhór dá chuid léachtanna ceimice trí mheán na Gaeilge agus é ina mhac léinn i nGaillimh, áit ar ghríosaigh an tOll. de Buitléir na mic léinn an fód a sheasamh don teanga trí léiriú don domhan mór gur teanga nua-aimseartha í an Ghaeilge ar féidir í a úsáid le hábhair theicniúla a phlé.

Thug sé ómós don bhaicle leachtóirí a mhúin ceimic trí Ghaeilge i nGaillimh: go háirithe an tOll. Pat McArdle,

Dr Gearóid Ó Máille *(ERC)*, joining from Brussels *via* MS Teams, described his career path from the laboratory to his current role as a Scientific Officer at the European Commission. He detailed some funding opportunities available for researchers under the "Horizon Europe" Framework Programme, with particular emphasis on the European Research Council (ERC) programme. The ERC is the European Commission's flagship funder for frontier research, and a range of grants are available for scientists at different career stages.

The strong link between chemistry and Irish in the University of Galway was also commemorated: for example, the revolutionary and famous professor Thomas Dillon (head of school from 1919), wrote the first chemistry book in Irish. This respect for the language continued in the subsequent generations: the school leaders Prof Proinsis O'Colla, Prof Seán Ó Cinnéide and Prof Richard (Dick) Butler, not to forget Prof Brendan Coughlan, who each did their share fervently to keep Irish alive in chemistry. Gearóid spoke about how lucky he was to have a large share of his chemistry lectures through the medium of Irish when he was a student in Galway, a place wher Prof Butler urged students to stand their ground for the language by demonstrating to the world that Irish was a modern language that could be used to discuss technical matters.

He paid respect to the group of lecturers who taught chemistry through Irish in Galway: especially Prof Pat

criostalagrafaí agus léachtóir den chéad scoth a fuair bás le rí-ghairid in Eanáir na bliana seo, agus an tOll. Mike Hynes, saineolaí ar chineiticí agus treoraí tuisceanach, a cailleadh i 2022. Bhásaigh an tOll de Buitléir go tobann i 2016.

McArdle, a first-rate crystallographer and lecturer, who died very recently in January of this year, and Prof Mike Hynes, an expert in kinetics and understanding teacher, who passed away in 2022. Prof Butler died suddenly in 2016.

Conclúid

Léirsigh an imeacht seo go raibh sé in-déanta plé leathan ar cúrsaí thaighde ceimice a chur i láthair trí mheáin na Gaeilge, agus go bhfuil éileamh ann freisin san ETIM. Tá súil ag an lucht eagraithe go mbeidh imeacht dá short arís sa thodhchaí.

Conclusions

This event demonstrated that it is completely possible to present broad discussion on topics of chemistry research in the Irish language, and that there is also demand for this in STEM. The organisers how that events of this type will take place again in the future.

Buíochas

Táimid fíor-bhuíoch as an tacaíocht a thug Institúid Ceimice an hÉireann, Líonra na gCeimiceoirí Óga, agus Cathoirleach an Líonra Seán Byrne. Buíochas freisin le foireann Ollscoill na hÉireann as an ionad a chur ar fáil: Cláraitheoir na hOllscoile an Dr Patrick O'Leary agus Cora Lenihan, ach go háirithe. Bhí tacaoícht bríomhar ó na urlábhraí uile a ghlac páirt riachtanach don imeacht uaillmhianach seo – mile bhuíochas dóibh a thug a gcuid ama don tionscadal.

Acknowledgements

We are very grateful for the support of the Institute of Chemistry of Ireland, the Young Chemists Network and Network Chair Seán Byrne. Thanks also to the team of the National University of Ireland for making a venue available: Registrar Dr Patrick O'Leary and Cora Lenihan in particular. The enthusiastic support of the all the speakers who took part was vital to this ambitious event – sincere thanks to those who committed their time to this project.

References

Versions of this report have appeared elsewhere:
Irish Chemical News, **2024**, *2*. Online (Accessed Mar 2025): www.chemistryireland.org/wp-content/uploads/2024/05/Irish-Chemical-News-2024-Issue-2.pdf
UCD Today, Spring/Summer 2024, p33. Online (Accessed Mar 2025) www.ucd.ie/universityrelations/eventspublications/readucdtodayonline/UCD%20Today%20Spring%20Summer%202024.pdf

Irish Chemical Events

Recent Advances in Synthesis and Chemical Biology XXIII

Report by: J. P. Byrne, P. J. Guiry*

Event Date: 13/12/2024

Venue: UCD Village

Event Type: Symposium

Report received: 12/06/2025

DOI: 10.5281/zenodo.16988449

http://zenodo.org/communities/ice/

Organising Committee: Pat Guiry (Chair)[a]

[a] School of Chemistry, University College Dublin, Belfield, Dublin 4, Ireland

Organisation: Centre for Synthesis and Chemical Biology

Event Sponsors

Royal Society of Chemistry Republic of Ireland Local Section, Eli Lilly, Thermo Fisher Scientific, Pfizer, Merck Life Sciences, Mason Technology, Agilent, MSD Ballydine, GPE Scientific and SSPC.

Summary

The 23rd instalment of *Recent Advances in Synthesis and Chemical Biology* was hosted by the Centre for Synthesis and Chemical Biology at UCD Village on Friday 13th December 2024. The programme included five plenary lectures by international research leaders Chris Willis, Bart Jan Ravoo, Kyle Vincent, Hon Lam and Matthew Sigman, as well as eight early-career presentations from various Irish universities. The next CSCB Symposium is scheduled for 12th December 2025.

Attendees

Approximately 160 chemists from academia and industry attended or presented at the meeting.

Target audience: academics, industrialists, postgraduates, ECR (academia/industrial)

Programme

The symposium programme is outlined in Table 1.

Table 1. Progamme of Speakers.

Time		
09:00-09:15	**Prof. James Sullivan** (UCD), Head of School of Chemistry	**Opening Remarks**
09:15-10:15	*Chair: Dr Eoghan McGarrigle (UCD)*	
	Prof. Chris Willis	University of Bristol
	The Eli Lilly Lecture: *"Exploring and Exploiting Biocatalytic Ring Formation*	
10:15-10:45	**Coffee/Tea Break**	**Poster Session I**
10:45-11:45	*Chair: Prof. Eoin Scanlan (TCD)*	
	Prof. Bart Jan Ravoo	**University of Münster**
	"Molecular Design of Photoswitches for the Assembly of Responsive Soft Matter"	
11:45-13:00	*Chairs: Dr Marina Rubini (UCD) and Prof. Aidan McDonald (TCD)*	
	Rachel O'Sullivan (UCD) - *The Enantioselective Synthesis of α-Ferrocenyl Tetraarylmethanes;* **Oscar Kelly (TCD)** - *Electrostatic Fields induce Accelerated PCET Rates in a Mg-porphyrin P680+ Mimic;* **Vanessa Becker (UCD)** - *Carbosulfonylation of Alkenes with Sulfinate Salts;* **Brian Durkan (RCSI)** - *Desulfurative fluorination of alkyl phenyl sulfides via bromonium catalysis;* **Celine Erkey (UCD)** - *Improvement of Therapeutic Potential via Site-Selective Modification in Human Interferon Gamma;* **Dr André Campanico (TCD)** - *Tackling the thiol-ene labelling of enzymes with light- and chemically triggered activity-based probes;* **Geoffrey Stosse (UCC)** - *Rhodium-Catalysed Enantioselective 1,4-Conjugate Additions on the Phenyl Backbone of Indole;* **Dr Marianne Haarr (UCD)** - *Enzyme-Triggered Reactions for the Construction of Complex Chiral Compounds*	
13:00-14:00	***Lunch Break***	**Poster Session II**
14:00-15:00	*Chair: Prof. Celine Marmion (RCSI, University of Medicine and Health Sciences)*	
	Prof. Kyle Vincent	**University of Oxford**
	"More Sustainable Biotechnology for Chemical Manufacturing: Exploiting Hydrogenases for Biocatalytic Hydrogenation"	
15:00-15:30	***Coffee/Tea Break***	**Poster Session III**
15:30-16:30	*Chair: Prof. Marcus Baumann (UCD)*	
	Prof. Hon Lam	**University of Nottingham**
	The Thermo Fisher Scientific Lecture: *"An Exploration of Morphinan Opioid Chemistry"*	
16:30-17:30	*Chair: Prof. Pat Guiry (UCD)*	
	Prof. Matthew Sigman	**University of Utah**
	The Pfizer Lecture: *"Developing Data Science Tools for Synthetic Chemists"*	
17:30	***Prof. Pat Guiry**, Director, Centre for Synthesis and Chemical Biology*	**Closing Remarks**

Prizes

POSTER PRIZES – awarded to Cian Cloonan (QUB); Rachel Lynch (UCD); Dr Gangireddy Sujeevan Reddy (UCC); Matthew Rowe (TCD).

Figure 1. Professor Pat Guiry with CSCB poster winners: Dr . Gangireddy Sujeevan Reddy (UCC); Matthew Rowe (TCD).

Acknowledgements

The organisers are grateful for the generous support of the sponsors listed above, who have supported the CSCB Symposia over many years.

Previous Events in this Series

This is the 23rd annual CSCB symposium.

Irish Chemical Events

8th Irish Biological Inorganic Chemistry Society Symposium (IBICS-8)

Report by: Christopher S. Burke*, Tara McInerney, Rebecca Galway, James Stack and William Daly.

Event Date: 06/12/2024

Venue: Western Gateway Building, University College Cork

Event Type: Symposium

Report received: 14/02/2025

DOI: 10.5281/zenodo.14872697

http://zenodo.org/communities/ice/

Local Organising Committee: Christopher S. Burke (Chair),[a] Orla Ni Dhubhghaill,[a] Jerry Reen,[a] William Daly,[a] James Stack,[a] Tara McInerney,[a] and Rebecca Galway.[a]

[a] University College Cork. *For further information on the event, contact: christopherburke@ucc.ie

Organisation: Irish Biological Inorganic Chemistry Society (IBICS).
Website: https://ibics.ie

Event Sponsors

Royal Society of Chemistry Republic of Ireland Local Section, Institute of Chemistry of Ireland, CRC Press, MSD, CEM, Particular Sciences, Mason Technology, Accuscience, GPE/Julabo, Scientific Laboratory Supplies (SLS)/Ohaus, Medical Supply Company (MSC).

Summary

The 8th Symposium of the Irish Biological Inorganic Chemistry Society (IBICS-8) was held at University College Cork on Friday, 6th December 2024. The annual IBICS symposia showcase recent work from researchers who work at the interface of inorganic chemistry and the life sciences, and provides an opportunity for networking between society members and industry representatives. At IBICS-8, over 70 attendees were present, including academics at all levels, from early career researchers to principal investigators, and industry sponsors and exhibitors. Two international plenary speakers headed the scientific programme; Prof. Tatjana Parac-Vogt (KU Leuven) and Dr. Jennifer Cavet (The University of Manchester). Three Ireland-based invited lectures were presented by Prof. Dmitri Papkovsky (UCC), Prof. Andrew Kellett (DCU) and Dr. Joseph Byrne (UCD). Aligned with the spirit of IBICS, the remaining contributions to the symposium came

from early career researchers with several excellent presentations, six flash presentations, and thirteen poster presentations. The event was a huge success, thanks to the strong engagement from our Irish biological inorganic community and the fantastic financial support from industry sponsors.

Attendees

Postgraduate and postdoctoral researchers, academics, and industry exhibitors/representatives made up most of the 70+ attendees at IBICS-8, working diversely across fields of inorganic chemistry and its interface with the life sciences. There was an excellent balance of female and male representation, from across different Irish institutions and beyond, and this was reflected in our symposium programme (Table 1).

Target audience: academics, postgraduate researchers, postdoctoral researchers, early career (academia).

Programme

IBICS-8 was a full one-day event, running from welcome and registration at 10am to closing remarks and reception at 6pm. Across three sessions, the scientific programme comprised eleven oral presentations contributed by two international plenary speakers, three invited Ireland-based speakers, the IBICS Gold Medal Award winner, and five early career researchers. In addition, six flash presentations across two quick-fire sessions showcased a sample of the thirteen poster presentations that were displayed at two designated poster sessions sponsored by the RSC Republic of Ireland Local Section. Each oral and flash session was chaired by a leading academic in the field of bioinorganic chemistry. The IBICS AGM was held during the lunch break of the symposium, and several other short breaks enabled a good opportunity for networking.

Table 1. IBICS-8 Scientific Programme

Time	Speaker and title of presentation
10:00	Registration, coffee and poster setup
10:30	Opening remarks – Dr. Luca Ronconi, IBICS President
	Session 1 - Chair: Dr. Orla Ni Dhubhghaill
10:40	**Plenary: Dr. Jennifer S. Cavet** (University of Manchester) *Metals at the Host-Pathogen Interface: Strategies for Overcoming Metal-Stress in Gastrointestinal Pathogens*
11:20	Dr. Joshua McLean (Royal College of Surgeons in Ireland) *Design and Synthesis of Clickable E3 Ligase Ligands for Novel Metallo-PROTAC Development*
11:35	Ryan Madden (Dublin City University) *Ru(II) tris-Heteroleptic Switch-on Probes for Selective Targeting of Pancreatic Cancer*
11:50	**Invited: Prof. Dmitri Papkovsky** (University College Cork) *Phosphorescent Metalloporphyrins and Optochemical Sensors for Cell Analysis*
12:20	**ICI Flash Session 1** - Chair: Dr. Diego Montagner *Sponsored by ICI*
12:35	Lunch (provided)
12:35	**Poster Session 1** *Sponsored by RSC Republic of Ireland Local Section*
13:25	IBICS Annual General Meeting
	Session 2 - Chair: Dr. Jerry Reen
13:55	**Invited: Prof. Andrew Kellett** (Dublin City University) *Recent Advances in Artificial Gene Editing and DNA Targeted Metallodrug Design*
14:25	Ella O'Sullivan (TU Dublin) *Investigation of Regulated Cell Death (RCD) Modalities in Novel Copper (II), Manganese (II) and Silver (I) Complexes Containing Dicarboxylate and 1,10-Phenanthroline Ligands*
14:40	Frederica Brescia (University of Galway) *Design and Development of Gold(III)-Glycoconjugates as Antiviral Agents Against SARS-CoV-2*
14:55	**Invited: Dr. Joseph Byrne** (University College Dublin) *Glycoconjugate Metal Complexes as Anti-adhesives against Pathogens*
15:25	**ICI Flash Session 2** - Chair: Prof. Orla Howe *Sponsored by ICI*
15:40	**Poster Session 2** *Sponsored by RSC Republic of Ireland Local Section*
	Session 3 - Chair: Prof. Michael Devereux
16:40	Eleanor Windle (University College Dublin) *Disaggregation of Metallo-phthalocyanines by Guanine-rich Nucleic Acid Sequences Monitored with Steady-state and Ultrafast Spectroscopies*
16:55	**Plenary: Prof. Tatjana N. Parac-Vogt** (KU Leuven) *Artificial Enzymes Based on Metal Oxo-clusters: from Discrete Species to Extended Materials*
17:35	**IBICS Postgraduate Gold Medal Award** Rhianne Curley (Dublin City University) *Visualising Stress Granule Dynamics with an RNA Guanine Quadruplex Targeted Ruthenium(II) Peptide Conjugate*
17:55	Prize-giving and closing remarks – Dr. Luca Ronconi
18:00	Wine reception

Proceedings

Dr. Christopher Burke (UCC), Chair of the local organising committee, warmly welcomed all attendees to UCC at its Western Gateway Building.

The IBICS president, **Dr. Luca Ronconi** (University of Galway), officially opened the symposium giving an overview of the history of IBICS symposia and the scientific programme to follow.

Session 1 – Chair: Dr. Orla Ni Dhubhghaill (UCC)

Our first international *plenary speaker*, **Dr. Jennifer Cavet** from The University of Manchester kicked off scientific presentations. Jen's research interests focus on infectious disease,

including to identify and examine the roles of metal homeostasis and metal sensing proteins in a variety of different bacterial pathogens. Her plenary lecture described four research stories centred on copper, zinc, and manganese transporters across different *Salmonella, Listeria, Campylobacter* and *Helicobacter* bacteria, discussing their associated roles and contributions to infection.

Next, **Dr. Joshua McLean** (RCSI, Griffith research group) presented on proteolysis targeting chimeras (PROTACs) and emerging work on the design and synthesis of ligase ligands that are amenable to click chemistry with bioactive Pt or Au complexes, including under bioorthogonal conditions. A gold metallo-PROTAC derivative was shown to exhibit high potency under biological evaluation.

Ryan Madden (DCU, Keyes research group) then presented on his work in developing a new light-switching tris-heteroleptic Ru(II) polypyridyl complex that selectively labels human pancreatic cancer cells for high-contrast fluorescence bioimaging diagnostics. Ryan also described ongoing parallel work on identifying peptide sequences and their target protein receptors that are upregulated following chemotherapy resistance.

Prof. Dmitri Papkovsky (UCC) followed next as our first *invited speaker*. Dmitri is a Professor at the UCC School of Biochemistry and Cell Biology and his research interests include phosphorescence based probes for sensing and imaging of cell and tissue oxygenation, live FLIM/PLIM microscopy, and their use to study roles of O_2 in biological systems, cell metabolism, bioenergetics and common disease states. His talk discussed his work on photoluminescent porphyrin dye systems as applied for cell analysis, including pH and O_2 sensing and the link to monitoring oxygen consumption and extracellular acidification rates.

Following lunch and the first poster session, the **IBICS AGM** was held with good attendance from members at the symposium.

Session 2 – Chair: Dr. Jerry Reen (UCC)

Restarting proceedings after the AGM was our second *invited speaker*, **Prof. Andrew Kellett** (DCU), who is Professor of Inorganic and Medicinal Chemistry in the School of Chemical Sciences at Dublin City University (DCU). His research interests focus on the discovery of metallodrugs, artificial gene editing tools, and DNA damage and repair. Andrew presented new work on artificial metallonuclease scaffolds that are built via click chemistry, including a bioactive C_3-symmetric ligand and its copper complexes that demonstrate capability for therapy through DNA damage.

Next, **Ella O'Sullivan** (TU Dublin, Howe and Devereaux research groups) presented recent work on Cu(II), Mn(II), and Ag(I) complexes bearing dicarboxylate and phenanthroline ligands. Ella described the relative therapeutic efficacy and differences in mechanisms of action against cancerous and non-cancerous cells based on the metal ion, elucidated from data from several assays and spectroscopic imaging techniques.

Frederica Brescia (University of Galway, Ronconi research group) then presented on a new approach to antiviral therapy using Au(III) glycoconjugates based on a scaffold that uses a linker bridge between monosaccharides and chemoactive gold (III) dithiocarbamato moieties that are posited to interact with the zinc-finger domain of SARS-CoV-2 papain-like protease.

Dr. Joseph Byrne (UCD) closed out this session as our third *invited speaker*. Joe is a Lecturer in Bioinorganic Chemistry at UCD and his research interests are in glycoscience, inorganic chemistry, luminescence and antimicrobial resistance. Joe communicated some recent research from his team, including Ru(II) glycoclusters with ranging capability to inhibit *P. aeruginosa* biofilms based on the nature of the carbohydrate motif, and approaches to targeting LecA lectin with emissive lanthanide complexes and metal-galactoside derivatives.

Session 3 – Chair: Prof. Mick Devereaux (TU Dublin)

The final session commenced with a presentation from **Eleanor Windle** (UCD, Quinn research group), who described the dual photodynamic therapy and photothermal therapy applications of Zn-phthalocyanine that depends on its aggregation and that can be disrupted by binding to guanine-rich nucleic acid sequences, as examined through a host of steady-state and time-resolved spectroscopic techniques.

The next contribution came from our second international *plenary speaker*, **Prof. Tatjana Parac-Vogt** from the Department of Chemistry at KU Leuven (Belgium). Tatjana's main research lines are the development of metal cluster-based complexes and materials such as polyoxometalates (POMs) and metal-organic frameworks (MOFs) for biologically inspired reactions with biomolecules and model systems. Her group is also creating new hybrid structures based on polyoxometalates using principles of biomolecular recognition and supramolecular chemistry. Accordingly, Tatjana's plenary lecture described her team's work on investigating catalytic MOF nanozyme structures and POM systems with embedded strong Lewis acid metal cations as artificial protease enzymes.

The final oral presentation of the symposium was given by **Rhianne Curley** (DCU, Keyes research group), who is this years' winner of the IBICS Postgraduate Gold Medal Award. Rhianne's award lecture centred on her recent PhD work on peptide-directed Ru(II) complexes that target RNA G-quadruplexes in live cancer cells to induce stress granule formation, and with capability to image this process via confocal fluorescence microscopy.

ICI Flash Sessions –

Session Chairs: Prof. Orla Howe (TU Dublin) and Dr. Diego Montagner (MU)

Six flash presentations were delivered across two flash presentation sessions, and were delivered by; Agnieska Kawalerska (TUD), Jack Daly (UCC), Amélia Auville (UCD), Karina Chan (RCSI), Daryl Reidy (MU), and Baile Wu (UCC). All flash presenters also contributed poster presentations to the Poster Sessions.

RSC Republic of Ireland Local Section Poster Sessions

Two poster sessions were held to maximise engagement and networking opportunities. In addition to the flash presenters listed above, poster presentations were also contributed by; Manal Alrashidi (University of Galway), Guilia Ferrari (MU), Judit Fodor (TCD), Conor Newsome (DCU), Stephen O'Sullivan (DCU), James Stack (UCC), and Leila Tabrizi (DCU).

The symposium was closed out by IBICS president, **Dr. Luca Ronconi**, with the presentation of prizes, his farewell address, and an invitation for all to join the wine reception for further discussion on the excellent presentations delivered throughout the symposium.

Figure 1. Presentation of gifts to plenary speakers, Dr. Jen Cavet (left) and Prof. Tatjana Parac-Vogt (right).

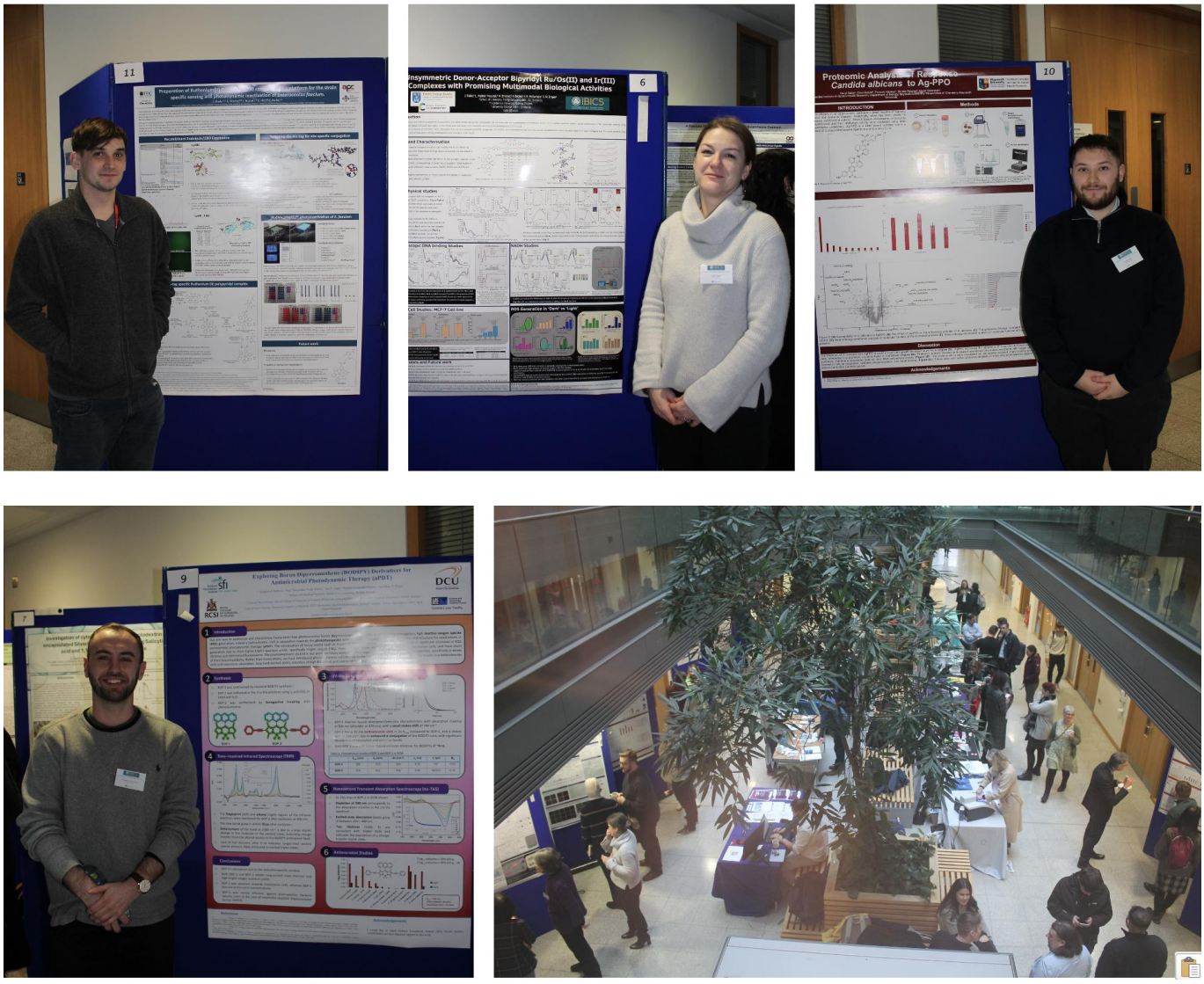


Figure 2. Some pictures from the Poster Sessions, including James Stack (Poster 11), Judit Foder (Poster 6), Daryl Reidy (Poster 10), and Stephen O'Sullivan (Poster 9).

Figure 3. Some pictures from across the symposium, including during the scientific programme, the welcome reception, poster sessions and closing wine reception.

Prizes

The **IBICS Postgraduate Gold Medal** was this year awarded to **Rhianne Curley** from Dublin City University. Rhianne, who is a final year PhD student under the supervision of Prof. Tia Keyes, focusses her research on the application of novel luminescent charge transfer compounds for live cell imaging and phototherapy, with the goal of advancing both diagnostic and therapeutic technologies. She has presented her work at numerous international conferences, earning presentation awards, and has published in prestigious journals such as *Angewandte Chemie*. The judging committee also recognised **Paul O'Dowd (RCSI) as a Highly Commended Runner-Up**.

The IBICS Postgraduate Gold Medal is awarded annually to one PhD student who has distinguished themselves across a range of criteria throughout their PhD with a focus on research performance, achievements and impact in the field of medicinal and biological inorganic chemistry across the island of Ireland. This year, the IBICS award selection committee was impressed by the high standard of applications that this medal continues to attract and strongly encouraged eligible researchers to apply to future competitions.

Figure 4. Dr. Luca Ronconi (IBICS President), presenting Rhianne Curley with the 2024 IBICS Postgraduate Gold Medal Award.

The IBICS president presented three sponsored prizes during the closing remarks of the symposium. Awardees in each category were selected by our independent panel of judges.

Firstly, the **MSD Best Oral Presentation** was awarded to **Ella O'Sullivan** (TU Dublin) who spoke on *Investigation of Regulated Cell Death (RCD) modalities in novel Copper(II), Manganese(II) and Silver(I) complexes containing dicarboxylate and 1,10-Phenanthroline ligands*. Ella is supervised by Prof. Orla Howe and Prof. Mick Devereaux (both TU Dublin). IBICS is grateful to MSD for their support of this prize as our exclusive silver-tier sponsor at IBICS-8.

Next, the **ICI Flash Prize** for the best flash presentation was awarded to **Karina Chan** from RCSI. Karina, who is supervised by Dr. Darren Griffith (RCSI), provided highlights from her work on the *Development of Pt-PROTACs to degrade Pt-binding Proteins*. As part of her prize, Karina was awarded a copy of *Targeted Metallo-Drugs: Design, Development, and Modes of Action* (Edited by Etelka Farkas & Celine J. Marmion) courtesy of the kind sponsorship of CRC Press - Taylor & Francis Group.

Lastly, the **RSC Republic of Ireland Local Section Best Poster Prize** was awarded to **Jack Daly** from University College Cork for communicating his work on *N,N-disubstituted-N'-acylthiourea metal(II) complexes as use for antifungal agents, the good, the bad, and the molecular geometry*. Jack is supervised by Dr. Davide Tiana and Dr. Dave Otway (both UCC).

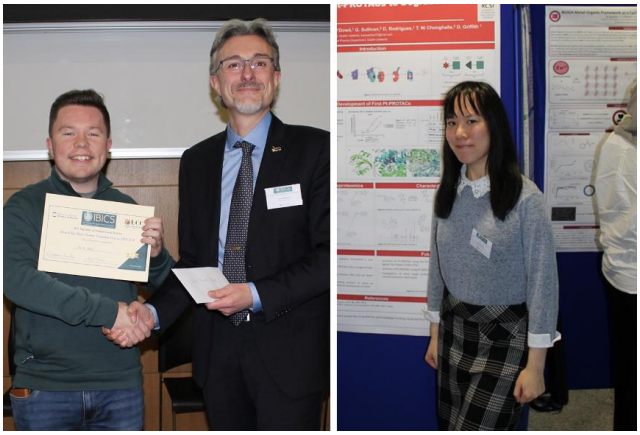


Figure 5. RSC Republic of Ireland Local Section Best Poster Prize was awarded to Jack Daly (left) and the ICI Flash Prize for the best flash presentation was awarded to Karina Chan (right).

The Irish Biological Inorganic Chemistry Society (IBICS)

The IBICS Mission Statement: The Irish Biological Inorganic Chemistry Society (IBICS) – is a learned Society engaging a multi-disciplinary community of scientists seeking to advance research that crosses the interface between medicinal inorganic chemistry and biology in Ireland. The Society's mission is to develop, foster and promote a strong national network of scientists collaborating in research areas such as

biology, chemistry, physics and medicine with an interest in biological inorganic chemistry.

The next symposium of the Irish Biological Inorganic Chemistry Society (IBICS-9) will take place at Maynooth University during the final quarter of 2025, being led by Dr. Diego Montagner. Please see the IBICS website for event updates (https://ibics.ie). IBICS welcomes any support for its symposia and the future activities of its members.

Acknowledgements

IBICS-8 was made possible by generous financial support from our sponsors: **Royal Society of Chemistry Republic of Ireland Local Section, Institute of Chemistry of Ireland, CRC Press, MSD, CEM, Particular Sciences, Mason Technology, Accuscience, GPE/Julabo, Scientific Laboratory Supplies (SLS)/Ohaus, Medical Supply Company (MSC).** Many of our sponsors exhibited at the event and contributed to a vibrant meeting.

The local organising committee is grateful to the IBICS Steering Committee for additional support, particularly Luca Ronconi, Diego Montagner, Deirdre Fitzgerald-Hughes, Joseph Byrne, Mick Devereaux, Orla Howe and Celine Marmion. The local committee also thanks our colleagues at UCC for facilitating our hosting of IBICS-8, including Dave Otway for his help with photography.

Figure 6. IBICS-8 local organising committee, from left: Tara McInerney, Rebecca Galway, William Daly, Christopher Burke, Orla Ni Dhubhghaill, Jerry Reen, James Stack.

Previous Events in this Series

- 8th Symposium of the Irish Biological Inorganic Chemistry Society (IBICS-8), University College Dublin, DOI:10.5281/zenodo.14052293
- Programmes and event reports for all previous IBICS symposia are available at: https://ibics.ie/ibics-symposia

Irish Chemical Events

Inaugural RSC ROI local section Retired Members Networking Event

Report by: F D Austin

Event Date: 12/03/2025

Venue: Ivy Restaurant, Dawson St, Dublin

Event Type: Networking Event

Report received: 11/04/2025

DOI: 10.5281/zenodo.15198720

http://zenodo.org/communities/ice/

Organising Committee: Dave Austin, CChem FRSC (Retired)

Event Sponsor

Royal Society of Chemistry Republic of Ireland Local Section

Summary

The RSC Republic of Ireland Local Section committee were looking to increase the type of events that it offered to members and looked at other local section activities for inspiration. Networking events for retired members had been carried out by some other local sections and it was decided to try this for 2024. Unfortunately there was insufficient interest as the invite went out with the Christmas card. The committee choose to send an e-card for Christmas 2024 with the invite and this allowed an e-alert follow up message in January 2025. This follow up proved decisive in generating enough interest to host an event in 2025. A lunch venue in Dublin was chosen to facilitate the inaugural networking event for retired members who travelled form far and wide across the country gathered at the Ivy Restaurant. People attended from Dublin, Cork, Clare, Tipperary and Waterford. This inaugural networking event was successful, with hopes expressed to repeat this type of event in the future. The attendees saw value in attending other Local Section events where their experience could be leveraged by members earlier in their careers.

Attendees

Attendees were from academia and industry. A number of universties were represented as well as industries such as quality control, pharmaceuticals, manufacturing and the oil industry.

Feedback

Everyone present at the event appreciated the opportunity to meet and connect with other retired members of the RSC ROI Local Section and agreed to allow their emails to be used to continue to share information and stay connected. Afterwards several attendees sent correspondence in appreciation of the event and expressing the hope that other events could be organised in the future for this cohort of members.

Acknowledgements

I would like to acknowledge the RSC Republic of Ireland local section committee for their support and encouragement in delivering this inaugural retired member networking event.

Irish Chemical Events

Nobel Laureate Morten Meldal Honoured With The UCD Biological Society Eve McCarthy Award 2025 For “Inspiring Aspiring Scientists”

Report by: Matthew Mion*

Event Date: 15/04/2025

Venue: George Moore Auditorium, O’Brien Centre for Science

Event Type: Award Lecture

Report received: 24/04/2025

DOI: 10.5281/zenodo.15575084

http://zenodo.org/communities/ice/

Organising Committee: T. Docherty (Auditor)[a], M. Mion* (Vice Auditor) [a], A. Smith (Secretary) [a], A. Maguire (Treasurer) [a], E. McCarthy (Treasurer) [a], C. Lusk (Events Officer) [a], A. Murphy (Events Officer) [a], A. Lyons (Events Officer) [a], T. Polgolla (Junior Secretary) [a], J. Polgolla (PRO) [a], A. Collins (PRO) [a], I. Vozza (CDO) [a], S. Hamm (CDO) [a], L. Tawoydh (Careers & Campaigns Officer) [a], R. Hathaway (Wildlife Officer) [a], M. Collins Kearns (1st Year Rep) [a], H. Woods (OCM) [a], L. McDonnell (OCM) [a], M. McDonnell (OCM) [a], Y. Potrova (OCM) [a], and K. Iudenkova (OCM) [a].

[a] University College Dublin (UCD)

Organisation: UCD Biological Society

Summary

On the evening of April 15th, 2025, the UCD Biological Society (BioSoc) hosted the inaugural Eve McCarthy Award for “Inspiring Aspiring Scientists”, presented to 2022 Nobel Laureate in Chemistry, Professor Morten Meldal, in a full auditorium at the O’Brien Centre for Science. The award was newly renamed in memory of Eve McCarthy, a final-year physiology student, former Treasurer, and a deeply loved member of the society.

The ceremony honoured Professor Morten Meldal for his enduring commitment to the mentorship and pioneering work in click chemistry, which the Nobel praised for bringing chemistry into an "era of functionalism". Meldal’s acceptance speech and keynote lecture were both intellectually engaging and emotionally resonant, touching on the logic of molecular design, the pursuit of chemical simplicity, and the spirit that drives discovery. His reflections underscored the interconnectedness of curiosity, creativity, and collaboration in research and life.

This award meant a great deal to many, not just within the society. Eve brought joy, energy, and conviction to everything she did, and BioSoc are proud to honour her. This award will continue in her name and hope it will always reflect her passion. More than a celebration of one scientist’s impact, the evening embodied the society’s core mission: to make science personal, accessible, and transformative, and to create a genuine community. It served as a fitting conclusion to a year defined by compassion, growth, resilience and a shared commitment to “Inspiring Aspiring Scientists.”

Attendees

~250 attendees were present, including students, academics, early-career researchers, members of the public, as well as friends and family of the society. The audience reflected a broad range of disciplines and backgrounds, with community at the forefront.

Target audience: Undergraduates, postgraduates, academics, ECRs, industrial scientists, society members, school students, members of the public, technicians/support staff.

Programme

Table 1. Programme for the Eve McCarthy Award 2025

Time	Speaker	Affiliation	Description
15:30	Dr Marina Rubini	UCD School of Chemistry	Discussion with chemistry postgrads/ECRs
17:30	Tommy Docherty (Auditor)	UCD Biology Society	Opening remarks and welcome
17:35	Matthew Mion (Vice Auditor)	UCD Biology Society	Introduction to the Eve McCarthy Award
17:40	Professor Morten Meldal	University of Copenhagen	Award acceptance and keynote lecture
18:40	Reception & Networking	–	Informal discussion, refreshments provided

Proceedings.

The Biological Society

The Eve McCarthy Award 2025 ceremony marked the final and most meaningful event of the year for the 11th session of the UCD Biological Society[1]. Auditor Tommy Docherty reflected on a year of growth, resilience, and renewal, taking pride in the "*variety of events*" and charitable efforts the society had achieved. Under his leadership, the committee delivered a wide-ranging programme that balanced academic enrichment with outreach, inclusion, and wellbeing, engaging students across disciplines and creating a sense of belonging.

Figure 1. The UCD Biological Society 2024/25 Committee alongside Professor Morten Meldal at the Eve McCarthy Award 2025. (Photo credit: Natasha Singh)

Docherty described the renaming of the award as both of "*great significance*" and "*deeply personal*", explaining that it honoured "*someone who had a lasting impact on all of us.*" His remarks captured the society's mission at its core: to not only promote scientific understanding but to foster connection, compassion, and inspiration among students. The Eve McCarthy Award ceremony stood as a reflection of this ethos, celebrating both excellence in science and the human values that sustain it

The Eve McCarthy Award

Vice Auditor Matthew Mion led a tribute to Eve McCarthy, framing the evening as not only a celebration of scientific achievement but also of personal legacy.[2] Eve was "*more than just a bright, bubbly student or a dedicated committee member…a true pocket-rocket, with energy that was contagious*." Eve, he recalled, inspired others through her fearless enthusiasm, deep curiosity, and drive to build community.

Mion shared, underscoring how Eve's spirit of action and belief in living fully left a lasting impact on those around her. The award, he explained, was created to honour individuals "*whose work not only transforms their field but who also dedicate themselves to inspiring the future of science.*"

Turning to the evening's honouree, Mion introduced Professor Morten Meldal as the first recipient of the *Eve McCarthy Award for "Inspiring Aspiring Scientists"*. Adding highlight to how Meldal's discoveries, especially the copper-catalysed azide-alkyne cycloaddition, have "*fundamentally transformed chemical synthesis*" and "*profoundly [impacted] the way science addresses critical issues*".[3] Just as Eve encouraged others to pursue bold ideas, Mion noted that Meldal "*embodies a commitment to mentorship, continually inspiring the next generation of researchers.*" He concluded with the final reflection that "*you could be known for what you said, you could be known for what you did, but people will never forget how you made them feel and you affected them*" a sentiment that, he emphasised, is at the heart of this award's purpose.

Figure 2. Professor Meldal receives 2025 Eve McCarthy Award; (L-R) Tommy Doherty, Matthew Mion, and Morten Meldal (Photo credit: Natasha Singh)

Keynote Lecture by Professor Meldal

Meldal used his acceptance speech as a platform to speak directly to the students and early-career scientists in the room, stating, "It is a really great honour… my main task in this world is to be an inspiration to students." He immediately dedicated the award "to Eve", adding, "I am very proud to receive this award, particularly because what we need as young people is exactly this energy, this 'I can do it, so I will'. This is the main core of what I try to teach my students." He concluded with an ode to curiosity and intrinsic motivation: "Get out of your cellphones, and do what you like to do."

With characteristic wit, Meldal then opened his keynote lecture, "Molecular Click Adventures: Enthalpy or Entropy Driven Reaction," by remarking: "When you get a Nobel Prize, you immediately increase your IQ by 20%. You get asked your opinion on everything—I don't know about everything, but I know chemistry is everything." The lecture was both scientifically rich and personally resonant. Meldal began by recounting his journey from a curious Danish boy exploring his grandparents' fields to a chemist whose innovations

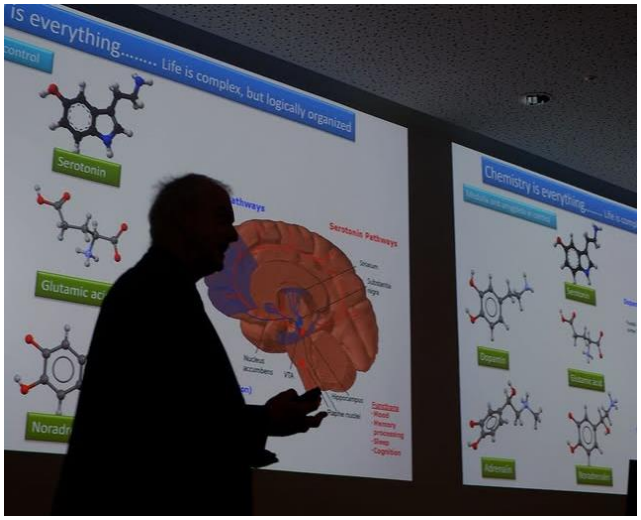


Figure 3. Professor Morten Meldal during this keynote lecture "Molecular Click Advents: Entropy or Enthalpy Driven Reaction" (Photo credit: Natasha Singh)

would transform science.

He focused on the copper-catalysed azide-alkyne cycloaddition (CuAAC), a modular, high-yielding reaction that has revolutionised the synthesis of complex molecules. "Life is complex but logically organised," he explained, positioning click chemistry as a tool that reflects this logic. He described its broad applicability: in biomolecular research, enabling precise tagging and pathway tracing; in drug development, where it underpins the design of antibody-drug conjugates and site-specific therapies; and in environmental and materials science, through the creation of functional polymers, biosensors, and sustainable chemical systems. Across each domain, Meldal showed how a single mechanistic insight can evolve to a platform for interdisciplinary innovation.

Figure 4. (L-R) Tommy Doherty, Matthew Mion, Professor Morten Meldal, and UCD President Professor Orla Feely. (Photo credit: Natasha Singh)

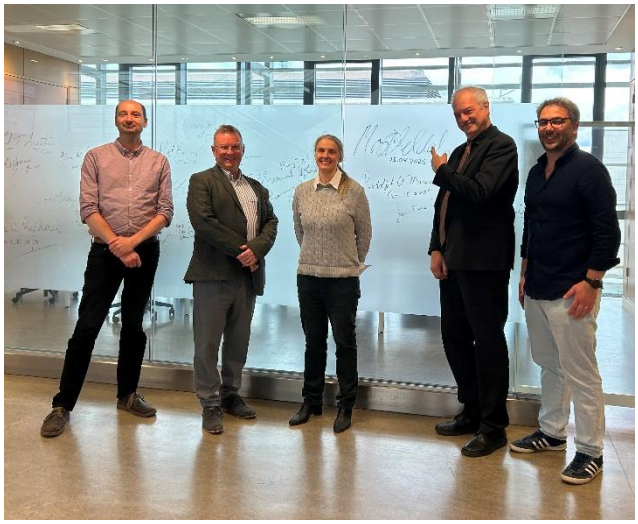


Figure 5. Prof Meldal singing the glass wall in the School of Chemistry.[3b] Pictured with Assoc. Prof. Marcus Baumann, Prof. James Sullivan, Dr Marina Rubini and Dr Aniello Palma. (Photo credit: School of Chemistry)

Feedback

> "*Prof Meldal visited the School of Chemistry before delivering the Eve McCarthy memorial Award. During that time, he signed our glass wall on the 3rd floor (joining other Nobel Prize winners, other eminent chemists Figure 5), met with a number of academic staff, and had an informal careers session with a collection of our postgraduate students and early career researchers…Meldal demonstrated a wide range of bio-orthogonal click chemistry examples…made a number of inspirational points about what to follow in an academic career and gave a wonderful overview of the week-long experience of collecting a Nobel Prize.*"
>
> - ***Professor James Sullivan, Head of School of Chemistry, UCD***

> "*I was delighted to be present at the UCD Biological Society event at which Nobel Laureate Professor Morten P. Meldal gave a very engaging talk and received the Society's Eve McCarthy Award.*
>
> *It was very impressive to see how UCD students initiated and led this very successful event, and very moving to see how they linked it so eloquently to the memory and legacy of the late Eve McCarthy*"
>
> - ***Professor Orla Feely, President, UCD***

> "*It was great to see such a huge turnout for a student-led event, clearly a reflection of the effort put in by the society and both the quality and benefit of the event they organised.*"
>
> - ***Lucy Warmington, Deputy Editor, University Observer***

> "*Thank you for this beautiful event, with the most wonderful sentiment at its heart.*"
>
> - ***Faith Molloy, Stage 4 Chemistry Student, UCD***

Acknowledgements

The UCD Biological Society would like to extend its sincere gratitude to Professor Morten Meldal for travelling from Copenhagen to accept the award and share his time, insight, and inspiration with the UCD community. We are especially thankful to President Orla Feely for her support and presence on the evening. Thank you to Natasha Singh (former committee member) for coming back, and photographing the event for us. To Eve McCarthy's family - Helen, Paul, and James - for allowing us to honour Eve's legacy in this way. And to Eve: thank you for everything - thank you for your friendship, for your dedication, for your support, for being you. Thank you for being our inspiration. Your influence continues to guide us, uplifting and driving everything that we work to do.

Finally, this event would not have been possible without the dedication of the 2024/25 BioSoc Committee, whose creativity, resilience, and teamwork shaped every detail of the evening. We also thank our collaborators and supporters across UCD: UCD Societies, College of Science, the School of Chemistry, and the broader university community.

Figure 6. Eve McCarthy at the George Sigerson Award 2024 (Photo credit: Natasha Singh)

References

[1] More information about UCD Biological Society: https://ucdsocieties.ie/biological/

[2] Reports: a) L. Warmington, "UCD Biological Society present Eve McCarthy Award to Nobel prize winner Morten Meldal", *University Observer*, 16 April 2025. https://universityobserver.ie/ucd-biological-society-present-eve-mccarthy-award-to-nobel-prize-winner-morten-meldal/; b) UCD School of Chemistry News, "Nobel Laureate Prof Meldal Signs Chemistry Glass Wall", 16 April 2025. https://www.ucd.ie/chem/newsevents/nobellaureateprofmeldalsignschemistryglasswall/ (Accessed 29/05/2025)

[3] Morten Meldal – Nobel Prize lecture. (Accessed 29/05/2025) https://www.nobelprize.org/prizes/chemistry/2022/meldal/lecture/

Irish Chemical Events

Inorganic Ireland 2025

Report by: C. Papatriantafyllopoulou

Event Date: 23/05/2025

Venue: University of Galway, Human Biology Building, Galway

Event Type: Symposium

Report received: 30/05/2025

DOI: 10.5281/zenodo.15556249

http://zenodo.org/communities/ice/

Organising Committee: C. Papatriantafyllopoulou (Chair),[a] C. Marmion,[b] G. Morgan,[c] M. Muldoon,[d] A. McDonald,[e]

[a] University of Galway; [b] Royal College of Surgeons in Ireland; [c] University College Dublin; [d] Queen's University Belfast; [e] Trinity College Dublin

Event Sponsors

Royal Society of Chemistry Republic of Ireland Local Section, Institute of Chemistry of Ireland, RSC Dalton Transactions, Complete Laboratory Solutions

Summary

The Inorganic Ireland Symposium 2025 took place on Friday, 23rd May at the University of Galway and brought together over 50 participants from across Ireland and beyond for a vibrant and engaging one-day meeting dedicated to inorganic chemistry. The symposium aimed to strengthen national collaborations, create space for early-career researchers to share their work, and celebrate the diversity and excellence of inorganic chemistry research in Ireland.

The programme featured a rich mix of scientific contributions, including two plenary lectures delivered by Prof. Richard Layfield (University of Sussex, UK), recipient of the 2023 RSC Corday-Morgan Prize, and Prof. Stuart James (Queen's University Belfast), recipient of the 2025 ICI David Brown Award. A heartfelt tribute lecture by Dr Andrea Erxleben (University of Galway) was also included, honouring the memory of Prof. Pat McArdle, to whom the symposium was dedicated. The scientific sessions further included 3 plenary-level talks, 14 oral presentations, 5 flash talks, and 18 poster presentations, with strong representation from postgraduate students and postdoctoral researchers across Irish institutions.

Two Early Career Poster Prizes were awarded to highlight excellent research from emerging scientists. The recipients of the poster prizes are Bhawna Kumari (UL) and Judit Fodor (TCD).

The symposium was generously supported by the Royal Society of Chemistry (RSC) Local Section Republic of Ireland, Dalton Transactions, the Institute of Chemistry of Ireland (ICI), and Complete Laboratory Solutions (CLS) and was organised by a national committee chaired by Dr Constantina Papatriantafyllopoulou and including Prof. Celine Marmion, Prof. Mark Muldoon, Dr Grace Morgan and Dr Aidan McDonald. The organisers are grateful to all attendees, contributors, and sponsors for making the event a memorable success.

Attendees

The symposium welcomed approximately 55 attendees, representing a broad mix of academic levels (undergraduates to senior academics), institutions across Ireland and beyond, and diverse cultural backgrounds. Gender representation was balanced across speakers and audience, with strong participation from early-career researchers and international attendees.

Target audience: academics undergraduates, postgraduates, retired members,

List of speakers

Richard Layfield (University of Sussex)
Stuart James (Queen's University Belfast)
Andrea Erxleben (University of Galway)

Fabio Santani (Trinity College Dublin)
Aibhe Boran (University of Galway)
Soumya Mukherjee (University of Limerick)
Darragh McHugh (University of Galway)
Federica Brescia (University of Galway)
Olivia Breed (University College Dublin)
Joseph Byrne (University College Dublin)
Tandra Ghoshal (Trinity College Dublin)
Joshua Thorogood (Trinity College Dublin)

Proceedings

Morning Session – *Chair: Constantina Papatriantafyllopoulou*

Richard Layfield (University of Sussex) – **2023 RSC Corday-Morgan Prize Lecture**: Masked Oxidation States in Lanthanide Organometallic Chemistry Fabio

Fabio Santani (Trinity College Dublin) – Triggering Weak Exchange Coupling Interactions in Metalloporphyrin-Based Quantum Logic Gates

Aibhe Boran (University of Galway) – Structural Elucidation and Morphological Exploration of Low Crystallinity Fe-based MCOFs for CO_2 Reduction Reactions

Midday Session – *Chair: John Simmie*

Soumya Mukherjee (University of Limerick) – Crystal Engineering of Azolate Coordination Networks for Cleaning Air and Freshwater

Andrea Erxleben (University of Galway) – Crystallography in Galway – In Memoriam Professor Patrick McArdle

Afternoon Session – *Chair: Grace Morgan*

Stuart James (Queen's University Belfast) – **ICI David Brown Award 2025 Lecture**

Darragh McHugh (University of Galway) – OnG7: A Metal–Organic Framework for Potential Chemotherapeutic Delivery in Breast Cancer Treatment

Federica Brescia (University of Galway) – Design and Development of Gold(III)-Glycoconjugates as Antiviral Agents against SARS-CoV-2

Olivia Breed (University College Dublin) – Two Centuries of Research and All I Got Was These Polymorphs: Diverse Polymorphism in Metal Ammonia Oxalate Hydrate Coordination Polymers

Final Session – *Chair: Diego Montagner*

Joseph Byrne (University College Dublin) – Glycoconjugate Metal Complexes as Anti-Adhesives against Pathogens

Tandra Ghoshal (Trinity College Dublin) – Fabrication of Sub-20 nm MoS_2 Horizontal Nanowire Arrays by Block Copolymer Assisted Inclusion Method

Joshua Thorogood (Trinity College Dublin) – Synthetic Magnesium Tetrapyrrole Radicals for Mechanistic Studies of Photosystem II

Prizes

Two poster prizes were awarded at the Inorganic Ireland Symposium 2025, with a focus on recognising excellent research and presentation skills among early career researchers. The recipients of the prizes are Judit Fodor (TCD) and Bhawna Kumari (UL)

Figure 1. Recipients of the poster prizes: Bhawna Kumari and Judit Fodor.

Figure 2. Prof. Stuart James receives the 2025 ICI David Brown Award.

About the ICI David Brown Award

This award was established in 2014 to honour Professor David Brown of University College Dublin in recognition of his enormous contribution to inorganic chemistry

both nationally and internationally. Professor Brown, together with Professor Bill Davis (TCD) hosted the International Conference on Coordination Chemistry (ICCC) in UCD in 1974. With some funds remaining, Professor Brown set up what became known as the Greystones weekend meetings, which were held in the LaTouche Hotel in Greystones and later in a more formal setting, in Maynooth University, hosted by Dr Malachy McCann every three years until 2005. This was re-launched as a one-day *Inorganic Ireland Symposium* and has been held approximately every two years since then. A highlight of this symposium is the presentation of the ICI David Brown award to a colleague who has made an outstanding contribution to inorganic chemistry.

Acknowledgements

We gratefully acknowledge the support of all sponsors as listed above, and the host institution, the University of Galway, for providing the venue and facilities. We would like to extend our appreciation to the session chairs, speakers, and all attendees for contributing to the vibrant atmosphere of the event. Special thanks to Manal Alrashidi, Constantinos G. Efthymiou, Darragh McHugh, and Ben Mohan for their pivotal role in organising and running the symposium.

Previous Events in this Series

The *Inorganic Ireland* symposium series has run approximately every second year in recent times. It is the successor of the Greystones Meetings, set up by Professor David Brown in the 1970s. Reports on some recent symposia are given below:

Inorganic Ireland 2023 (Trinity College Dublin), Programme available on Institute of Chemistry of Ireland website, https://www.chemistryireland.org/wp-content/uploads/2023/06/Inorganic-Ireland-Symposium-2023-Programme.pdf (Accessed 30/05/2025)

Inorganic Ireland 2021 (Online). *Irish Chemical News*, **2021**, *5*, 34

Inorganic Ireland 2018 (Queen's University Belfast), *Irish Chemical News*, **2019**, *1*, 10.

Inorganic Ireland 2017 (Royal College of Surgeons in Ireland), *Irish Chemical News*, **2017**, *3*, 18.

Irish Chemical Events

16th Jenner Glycobiology and Medicine Symposium

Report by: Aisha Jamal and Dr. Róisín O'Flaherty

Event Date: 11/06/2025–13/06/2025

Venue: Department of Chemistry, Maynooth University, Ireland

Event Type: Symposium

Report received: 16/07/2025

DOI: 10.5281/zenodo.16994105

Organising Committee: Dr. Róisín O'Flaherty (Chairperson)[a,b,c,#,*], Dr. Gordon Greville[d,*], Dr. Nezira Delagic[c,d,*], Dr. Trinidad Velasco-Torrijos[a,c,*], Dr. Catherine Bannon[c,d,*], Andreea Cislaru[a,*], Emily Harlin[a,*], Ismail Emre Yağmur[a,c,*], Aine O'Brien[a,*], Elizabeth Rozeboom[a,*], Barbara Woods[a,*], Aisha Jamal[a,b,*]. Prof. John Axford[e,#], Prof. Pauline Rudd[f,#], Prof. Ceslo A. Reis[g,#], Prof. Henrik Clausen[h,#], Prof. Claudine Kieda[i,#], Dr. Katrine Schjoldager[j,#], Prof. Nico Callewaert[k,#], Prof. Ghislain Opdenakker[l,#].

[a] Department of Chemistry, Maynooth University, Maynooth, Co. Kildare, Ireland. [b] CURAM Institute, NUIG, Co. Galway, Ireland. [c] Kathleen Lonsdale Institute for Human Health Research, Maynooth University, Maynooth, Co. Kildare, Ireland. [d] Department of Biology, Maynooth University, Maynooth, Co. Kildare, Ireland. [e] Department of Clinical Rheumatology, St. George's University of London, London, United Kingdom. [f] University College Dublin, Dublin, Ireland. [g] Glycobiology in Cancer, i3S-Institute for Research and Innovation in Health, University of Porto, Portugal. [h] University of Copenhagen, Faculty of Health Sciences, Copenhagen, Denmark. [i] Centre de Biophysique Moléculaire (CBM) of the Centre National de la Recherche, Orleans, France. [j] Department of Cellular and Molecular Medicine, University of Copenhagen, Copenhagen, Denmark. [k] Medical Biotechnology Center, VIB, University of Ghent, Ghent, Belgium. [l] Rega Institute for Medical Research, KU Leuven, Belgium
*Organizing Committee #Scientific Committee

Event Sponsors: See list on final page of this Report

Summary

The 16th Jenner Glycobiology and Medicine Conference was held on 11-13 June 2025 in Maynooth University, Ireland. Chaired by Dr. Róisín O'Flaherty, the Scientific Committee aimed to provide an international forum for scientists and clinicians to disseminate the findings of current leading-edge research in the field of Glycoscience. The program was devoted to addressing and integrating different aspects of Glycoscience in physiological and pathological settings, including Chemistry, Immunology, Infection, Cancer and Neurological disorders. In addition to internationally renowned speakers, a number of poster and oral presentations were selected from the submitted abstracts, creating a stimulating discussion platform to address current and future challenges of Glycobiology and Glycotechnology.

This year we introduced the *Rising Stars in Glycoscience Satellite Conference* on 11 June 2025 at the National Science and Ecclesiology Museum in Maynooth University before the start of 16th Jenner Glycobiology and Medicine Symposium to give a special opportunity for earlier career glycoscientists to present and learn from veterans in the field. The satellite event was chaired by Dr. Gordon Greville. It was free of charge to participants, and the aim was to bridge the gap between early career researchers and established experts, enhancing the early career researcher's professional development and networking opportunities.

Attendees

The 16th Jenner Glycobiology and Medicine Symposium has been attended by 220 delegates which includes researchers, clinicians, patient, industrialists, PhD and postdoc students. 180 delegates were international from countries around the world including France, Portugal, Denmark, Belgium, Netherlands, United States, Germany, Croatia, Austria, Japan, Czechia, UK, Poland, Canada, Switzerland, Sweden and Slovakia. A

glimpse of the event is available at the 16th Jenner Glycobiology and Medicine Symposium website.

Target audience: Academics, industrialists, clinicians, patients, early career researchers, postgraduate students

A selection of attendees at the 16th Jenner Glycobiology and Medicine Symposium in Maynooth University, Ireland. Front row comprises member of scientific committee and organising committee including chairperson Dr Roisin O'Flaherty (red).

Programme

The 16th Jenner Glycobiology and Medicine Symposium attendees were struck by the insights and discoveries of numerous researchers. Some speakers were at the initial stages of their career, and some had followed a long path in the field including Prof. Pauline Rudd, one of pioneers in the field of Glycobiology (one of the original and longstanding members of the Scientific Committee). Below is the list of sessions along with the name of researchers and their topics of interest.

Session 1: Sialic Acid Biology: From Tumour Immunity to Tissue Engineering	
Yvette Van Kooyk, *Amsterdam UMC, The Netherlands*	Sialylation of the tumor microenvironment and its impact on immune suppression
Sandra van Vliet, *Amsterdam UMC, The Netherlands*	Site-specific reprogramming of the tumor-immune microenvironment through sialic acids
Jack Cheeseman, *Ludger Ltd, The United Kingdom*	Potential sialic acid and glycomic biomarkers of cardiovascular disease
Aert Scheper, *CÚRAM Research Ireland Centre for Medical Devices, Ireland*	IVD regeneration in a canine nucleus pulposus injury model – using sialylation inhibitor-loaded injectable hydrogels for IVD repair
Session 2: Glycosylation Pathways: Mechanisms and Modulators	
Matthew Wilson, *KU Leuven, Belgium*	Revising dolichol biosynthesis: an unexpected detour
Frederic Bard, *Centre de Recherche en Cancérologie de Marseille, France*	ER *O*-glycosylation in synovial fibroblasts drives cartilage degradation
Mark Robinson, *Maynooth University, Ireland*	Assessing glycosylation enzyme expression in activated innate lympocyte subpopulations
Qianyue Zhang, *Leiden University Medical Center, The Netherlands*	Obesity affects the adipocyte glycosylation machinery and *N*-glycan profiles in mice
Nele Festjens, *VIB-Ugent Center for Medical Biotechnology, Belgium.*	*N*-glycosylation engineering in chimeric antigen receptor T cells enhances anti-tumor activity
Session 3: Mucosal Glycobiology: Roles of Mucins and *O*-Glycans in Disease	
Gunnar C Hansson, *University of Gothenburg, Sweden*	The highly glycosylated mucins form different types of mucus that both inhibit and cause disease of the intestine and lung
Rajindra Aryal, *Harvard Medical School, USA*	Unravelling the role of extended *O*-glycans in human biology: insight from the pathogenic variants of C1GALT1C1
Rebecca Bennion, *Cancer Research Center of Marseille, France*	Defining ER-localised *O*-glycosylation in pancreatic ductal adenocarcinoma
Joseph J Barchi Jr, *Centre for Cancer Research*	(Ir)rational design of mucin glycopeptides as tumor immunotherapeutic agents
Session 4: Cancer Glycobiology	
Mathieu Decloquement, *University of Alberta, Edmonton, Canada*	Deciphering siglec ligands in cancer to improve immunotherapy
Catarina Azevedo, *University of Porto, Porto, Portugal*	Glycoengineering of CD8+ T cell as a novel strategy to enhance T cell anti-tumor therapies

Ines Moreira, *Hannover Medical School, Germany*	Neolactotetraosylceramide enables urinary detection of bladder cancer
Rafaela Abrantes, *University of Porto (i3S), Portugal*	Novel CAR T formulations targeting tumor-associated glycoepitopes: a new strategy for solid tumors
Ana Magalhaes, *University of Porto (i3S), Portugal*	Heparan and chondroitin sulfate proteoglycans cellular switch and functional implications for gastric cancer
Session 5: Glycosylation and Immune Modulation in Disease	
Yusuke Mimura, *NHO Yamaguchi Ube Medical Center, Japan*	Galactosylated and afucosylated glycoforms of intravenous immunoglobulin control inflammation
Cengiz Goekeri, *Charité - Universitätsmedizin Berlin, Germany*	Unravelling the role of terminal fucosylation in Pneumococcal Pneumonia
Daniel Hornikx, *Radboud University, The Netherlands*	Dissecting siglec-15 ligand expression in thyroid cancer
Padryk Merkyl, *ETH Zurich, Switzerland*	Mucin degrading enzymes – a platform to study their activity
Shasha Li, *Queen's University Belfast, United Kingdom*	Development and testing of novel small molecule inhibitors for the manipulation of IgE glycosylation
Session 6: Glycoimmune Modulation: Mechanistic Insights from GlycoRNA to Host-Pathogen Interactions	
Ryan Flynn, *Harvard University, USA*	GlycoRNA biology on the cell surface
Michelle Kilcoyne, *University of Galway, Ireland*	Glycomics microarrays for profiling host immune-pathogen interactions and measuring adaptive immune response
Joana Gomes, *University of Porto (i3S), Portugal*	ST6GAL1 role in antibody therapy response and immune evasion of colorectal cancer
Radka Fahey (Saldova), *NIBRT, Ireland*	Endometriosis specific vaginal microbiota links to urine and serum *N*-glycome
Session 7: Glycobiotechnology	
Dr Tomas Carroll & Orla Keane, *Alpha-1 Foundation Ireland*	Alpha-1 antitrypsin deficiency - precision medicine for COP
Leander Meuris, *VIB-UGent Center for Medical Biotechnology, Belgium*	Validation of the glycomics-based glycocirrhotest as predictor of risk of HCC development in Cirrhosis
Andreea Cislaru, *Maynooth University, Ireland*	Chemoenzymatic strategy for single glycoform monoclonal antibody production
Noortje de Haan, *Amsterdam UMC, The Netherlands*	Cell surface glycoproteomics to study the differential glycosylation of Cancer glycoproteins
Session 8: Glycosylation in Human Development and Disease	
Andres Salumets, *Karolinska Institute, Sweden*	Glycobiology of human conception
Julia Vreugdenhil, *Genos Ltd, Croatia*	De novo sequencing of human milk oligo-saccharides using IM-MS
Richard Drake, *Medical University of South Carolina, USA.*	Detection of immune cell glycosylation as an indicator of metabolic activity in the tumour tissue microenvironment using *N*-glycan and multiplexed-IHC mass spectrometry imaging

Prizes

The 16th Jenner Glycobiology and Medicine Symposium organised oral presentations and poster presentations. There were six winners for poster presentations including Emily Harlin, *Maynooth University, Ireland*; Amrutha Varshini Hariharan, *CURAM, University of Galway*; Mathieu Decloquement, *University of Alberta, Canada*; Ana Costa, *University of Porto, Portugal;* Sandhya Sridhar, *Francis Crick Institute, UK* and Manuel M Vicente, *Hannover Medical School, Hannover, Germany*. The winners for oral presentations were Julia Vreugdenhi (RSC), *UMC, Netherlands* and Ines B. Moreira, *Hannover Medical School, Hannover, Germany*.

 10.5281/zenodo.16994105-p 3

The winners of the poster presentation (left) and the winner of the oral presentation (right) at the 16th Jenner Glycobiology and Medicine Symposium in Maynooth University, Ireland.

The oral presentation competition winners for the Rising Star event included Lyndsay Young, *Medical University of South Carolina, Charleston, South Carolina, USA* and Rafaela Abrantes, *University of Porto, Porto, Portugal*.

Feedback

The 16th Jenner Glycobiology and Medicine Symposium received warm feedback from attendees. Many expressed a strong desire to join the symposium again and truly appreciated the friendly and engaging environment throughout the event. Some of the comments given included,

> 'Thank you for this well-organized and inspiring conference!'

> 'I loved the conference. I'm very grateful to have gotten so much knowledge from the presentations, talks, and chats with everyone! Thank you once more :)'

A special event steeped in history

The 16th Jenner Glycobiology and Medicine Symposium not only integrated the scientific community having a diverse pool of researches from all over the world but also left an unforgettable impression and created lasting lifetime memories. Highlights included an insightful interview with Prof. Pauline Rudd where she shared her personal experiences and motivated the audience members in their scientific journeys. Additionally, to make the event memorable, our chair Dr. Roisin O'Flaherty performed with her band (The Beartlas) at the dinner in Pugin Hall, Maynooth University, Ireland which was the perfect icing on the cake for many attendees. A description of the event and the abstract book of the event are available on the 16th Jenner Glycobiology and Medicine Symposium website. The upcoming 17th Jenner Glycobiology and Medicine will take place at the Amsterdam UMC, The Netherlands and will be chaired by Prof Yvette van Kooyk.

A selection of images of the 16th Jenner Glycobiology and Medicine Symposium including the Committee Dinner at the Carriage House, Carton House, Maynooth, Ireland (upper), an interview of Prof. Pauline Rudd by Prof. John Axford (lower left) and an eventful dinner evening at the Pugin Hall, Maynooth University, Ireland, featuring the Beartla O Flatharra Ceili Band (lower right).

Acknowledgements and Event Sponsors

The 16th Jenner Glycobiology and Medicine Symposium was made successful with the contributions from our Scientific Committee and Invited Speakers (upper left), the Organizing Committee (upper right) and Sponsors (bottom), all who played a pivotal role in ensuring the event's success.

Selected members of the Scientific Committee and Plenary Speakers (left) and the organising committee (right)

Logos of all Event Sponsors

The event was sponsored by ThermoFisher, the RSC Republic of Ireland Local Section, the RSC Carbohydrate Interest Group, Element, BioLabs, Agilent, GlycoDepot, Sciex, Ludger, Promega, the Kathleen Lonsdale Institute for Human Health Research, MU Social Sciences Institute, GlycoDiag, CÚRAM Research Ireland Centre for Medical Devices, Biochemical Journal and Eversyn. Partners included Fáilte Ireland and the Mizutani Foundation for Glycoscience.

Previous Events in this Series

The Jenner Glycobiology and Medicine symposia were the first and main international multidisciplinary conferences set up to study the relevance of glycobiology to immunology, medicine and clinical practice. The symposia have been organised, since 1990, in collaboration with the Royal Society of Medicine with the aim of widening clinical participation and to actively promote and foster fruitful interaction and collaboration between glycobiologists and clinicians. The list of events over the last two decades include:

1. *Edward Jenner's House, Bath, UK (1990).*
2. *St George's Medical School, London, UK (1992).*
3. *Il Ciocco, Italy (1994).*
4. *Loutraki, Greece (1996).*
5. *Royal Society of Medicine, London, UK (2000).*
6. *Domaine de Seillac, France (2002).*
7. *Exeter College, Oxford, UK (2004).*
8. *University College Dublin, Ireland (2007).*
9. *Académie Royale de Médecine de Belgique, Brussels (2009).*
10. *Den Haag, The Netherlands (2012).*
11. *Paris, France (2015).*
12. *Dubovnik, Croatia (2017).*
13. *Harvard University, Boston, USA (2019).*
14. *Rega Institute, KU Leuven, Belgium (2021).*[1]
15. *University of Porto, Portugal (2023).*
16. *Maynooth University, Ireland (2025).*

References

[1] O'Flaherty, R., Opdenakker, G., Clausen, H., Gerardy-Schahn, R., Kieda, C., Reis, C. A., Rudd, P. M., Sadrieh, A., Axford, J. (2022). Meeting report on 14th Jenner Glycobiology and Medicine Symposium: glycobiology in immunology, medicine, and clinical practice. *Glycobiology*, *32*(6), 458-459. https://doi.org/10.1093/glycob/cwac006

Irish Chemical Events

76th Irish Universities Chemistry Research Colloquium

Report by: F. Heaney and D. Rooney

Event Date: 16/06/2025 – 17/06/2025

Venue: Maynooth University

Event Type: Conference

Report received: 13/08/2025

DOI: 10.5281/zenodo.17018281

http://zenodo.org/communities/ice/

Organising Committee: Sarah Bonham, Michelle Doran, Karen Herdman, Keane McNamee, Keela Kessie, Stephen Barrett, Barbara Woods, Denise Rooney, Frances Heaney

Chemistry Department, Maynooth University

Event Sponsors

RSC Local Section (Republic of Ireland), Institute of Chemistry of Ireland, Advion Interchim Scientific, Alltech Inc., Almac Group, Cruinn Diagnostics Ltd., Element Lab Solutions, Eurachem Ireland, Fluorochem Ltd., GPE Scientific, Henkel, Intel Corporation, Mason Technology, PerkinElmer, Scientific Laboratory Supplies, SSPC, Maynooth University

Summary

The Irish Universities Chemistry Research Colloquium, run under the aegis of the Institute of Chemistry of Ireland (ICI), has postgraduate research as its central focus. It is the longest-running scientific conference in Ireland. At this 76th event in the series, in a welcoming and supportive atmosphere post graduate students presented their research; there were 39 oral presentations as well as 18 flash and 83 poster presentations. There were also opportunities to discuss research more informally. All areas of chemistry were covered with themed sessions in Medicinal and Organic Chemistry, Materials, Electrochemistry, Sustainable and Environmental Chemistry, Reaction Mechanisms and Computational Chemistry.

Dr Michelle Browne (Helmholtz Zentrum Berlin für Materialien und Energie) and Prof Steven Bell (QUB) were inspiring Plenary Speakers and Dr Fionn McNeill (UCD) delivered the Institute of Chemistry of Ireland Dervilla Donnely Postgraduate Award lecture.

A number of sponsors attended the meeting and some exhibited at stands throughout the event.

The ICI Young Chemists Network held its annual general meeting at the event, and a session on how to prepare for a PhD Viva, while a working lunch for Heads/Representatives of Chemistry Departments across Ireland took place.

Attendees

More than 200 delegates from 14 different Institutions across the Island of Ireland registered for this meeting.

Target audience: academics, postdoctoral researchers, undergraduate and postgraduate students, technical officers/support staff, industrial sponsors, professional body members (RSC, ICI, Eurachem), members of national scientific centres.

Programme

Table 1. Programme for 76th Irish Universities Chemistry Research Colloquium

Time	June 16th	
10.15-11.15	*Plenary:* ***Dr Michelle Browne*** *Chair: Prof. Carmel Breslin*	
11.15-11.45	*Coffee Break and Poster Setup*	
11.45-13.00	**Electrochemistry** *Chair: Dr Constantina Paptriantafyllopoulou* Dominik Duleba (UCD) Rashma Kidayaveettil (Galway) Pei-Hsuan Wu (TCD) Rupa Ranjani Planisamy (UCC) *Flash:* Aoife Newman (MU), Robert Guest (UL), Catherine Noonan (Galway)	**Medicinal Chemistry** *Chair: Dr Gavin D'Arcy* Andrea Cislaru (MU) Aoife Cotter (UL) MounaHind Laiche (RCSI) Eleanor Windle (UCD) *Flash:* Ryan Madden (DCU), Fayanne Nolin (TCD), Jack Daly (UCC)
13.00-14.30	*Lunch and* ***ICI Young Chemists Network Meeting***	
14.30-16.00	**Materials Chemistry** *Chair: Dr Susan Kelleher* Darragh McHugh (Galway) Francesca Adami (UCD) Julian Carolan (TCD) Liam Jowett (UCD) *Flash:* Anna Nakonechna (RCSI), Catherine Cleary (UL), Ciara Tobin (DCU)	**Organic Synthesis** *Chair: Dr Stephen Barrett* Zoe Byrne (UCD) Abinash Nayak (SETU) Aoife Martin (UCD) Adam McCormack (MU) Niamh Lehane (UCD) *Flash:* Amélia Laetitia Auville (UCD), Ben Mohan (Galway), Brian Durkin (RCSI)
16.00-16.15	*Comfort Break*	
16.15-17.15	**Sustainable and Environmental Chemistry** *Chair: Dr Fergal Byrne* Marilia Dalla Benetta (MU) Christine Coffey (UCD) Santiago Martinez Sosa (Galway) *Flash:* Krishna Hari (UL),Perveen Akhtar (TUD), Doireann O'Leary Brennan (UCC)	**Reaction Mechanism, Computational Chemistry** *Chair: Dr Davide Tiana* Adam Cruise (UCD) Matthew Murray (Galway) Ardra Karthika (Galway) *Flash:* Anja Gotzen (TCD), Eoghan Courtney (UCD), Daryl Rediy (MU)
17.15-18.45	***Poster Session***	
18.45	***Social evening***	

Time	June 17th	
09.30-10.30	*Plenary:* ***Prof. Steven Bell*** *Chair: Prof. Declan Gilheany*	
10.30-11.30	**Materials Chemistry** *Chair: Dr Daniele Alves* Viktorija Mikaite (UCD) Giada Diana (UL) Kathryn McCarthy (Galway) Joseph Monaghan (MU)	**Organic Synthesis** *Chair: Dr Luke Brennan* Oliwier Dulawa (MU) Parth Naik (UCD) Sebastian Pim (RCSI) Rachel Lynch (UCD)
11.30-12.00	*Coffee Break*	
12.00-13.00	**Materials/ Electrochemistry** *Chair: Dr Sousa Javan Nikkah* Shane O'Neill (UCD) Laura Coffey (UL) Levente Nagy (Galway) Olivia Breen (UCD)	**Medicinal/Organic Chemistry** *Chair: Dr Laura Diaz Casado* Federica Brescia (Galway) Amani Al Riyami (TCD) Vanessa Becker (UCD)
13.15-13.40	*ICI Dervilla Donnelly Postgraduate Award Lecture:* ***Fionn McNeill*** *(UCD)* *Chair: Prof. Steven Bell (President, ICI)*	
13.40-14.00	*Prizegiving and Colloquium Closing Ceremony* *Prof. Steven Bell*	

Prizes

Congratulations to all our oral, flash and poster presentation prize winners – Liam Jowett (UCD), Joseph Monahan (MU) Aoife Martin (UCD), Vanessa Becker (UCD), Matthew Murray (UoG), Katy Murray (State Lab/TUD), Anna Nakonechna (RCSI), Doireann O'Leary (UCC), Allessio Zavaroni (MU), Niamh Hickey (UL), Liam Casey (UCD), Ciara Tobin (DCU) and Anjan Gotzen (TCD)

Figure 1. Photograph of prize winners at the 76th Irish Universities Chemistry Research Colloquium at Maynooth University together with Professor Steven Bell, President Institute of Chemistry of Ireland

Acknowledgements

Thanks are extended to all who attended and participated in the 76th Chemistry Colloquium and to the sponsors that made the event happen! Particular thanks to those who chaired sessions and judged oral and poster sessions. We acknowledge the help of all volunteers and MU professional service staff who dedicated their time and effort to make the event a success.

Irish Chemical Events

Lecture by Dr. Peter Morris (Science Museum, London) *"Form and Function: The History of the Chemistry Laboratory, 1700 to 2005"* and launch of the book *"Trinity College Dublin – 300 Years of Chemistry"*

Report by: John M. Kelly

Event Date: 30/06/2025

Venue: Tercentenary Theatre, Trinity College Dublin

Event Type: Other

Report received: 29/07/2025

DOI: 10.5281/zenodo.16993901

http://zenodo.org/communities/ice/

Organising Committee: John Boland, Peter Boyle, David Grayson, John M. Kelly

Organisation: School of Chemistry, Trinity College Dublin

Event Sponsors

The Royal Society of Chemistry, Republic of Ireland Local Section

TCD Provost Office

Pfizer Healthcare Ireland

Henkel Ireland

A gift from the Dr. Mary Carson Benefaction, a friend of the School and one of the first female academics

Summary

On Monday, June 30th, we were delighted to launch a new book *"Trinity College Dublin – 300 years of Chemistry"*, written and edited by current and emeritus professors, John Boland, Peter Boyle, John Kelly, David Grayson and the late Brian McMurry (Figure 1). The book provides a fascinating history of the School and details its contributions to pharmaceutical and other industries as well as giving an insight into the stories of some of the distinguished people who have enriched our legacy. The launch event began with a seminar hosted by the Royal Society of Chemistry entitled "Form and Function: The History of the Chemistry Laboratory, 1700-2005", which was given by Professor Peter Morris of the Science Museum in London (Figure 2). This was followed by the official launch of the book and a wine reception where school alumni as well as past and present staff were able to gather and share their memories and stories of their time with us.

Attendees

191 attendees registered on Eventbrite and it is estimated that an additional 20+ walk-ins attended the lecture and book launch (Figure 3).

The event was attended by current TCD Chemistry staff and students, including RSC and ICI members. Academics for other Schools and universities also attended, in addition to alumni and retired members of staff from the School of Chemistry. Several members from the School's Industry Advisory Board were also in attendance, whose companies supported the launch.

The venue was fully wheelchair accessible, canapés provided gave diverse gluten-free and vegan options to cater for dietary requirements and a selection of non-alcoholic beverage options was available in addition to wine. EDI data was not collected at registration so exact gender split amongst the attendees is uncertain.

Target audience: academics, industrialists, undergraduates, postgraduates, alumni, general public, RSC members, ICI members.

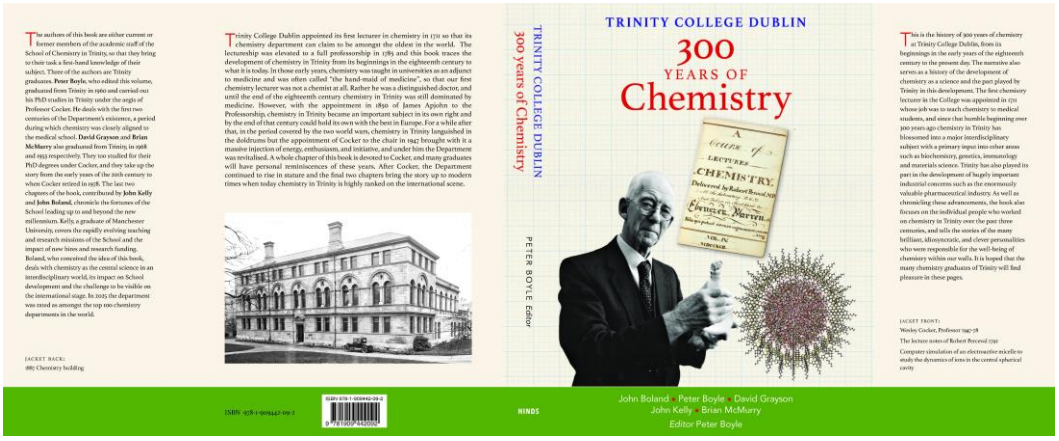


Figure 1. Image of the jacket cover for the new book

The Book

100 books were sold at the event itself, following which the book became available at the Trinity bookstore and has since sold an additional 30 copies. The book is published by Hinds, 13 Carlisle Avenue, Dublin 4 and has **ISBN 978-1-909442-09-2**.

Programme

5pm Lecture by Dr. Peter Morris - Form and Function: The History of the Chemistry Laboratory, 1700 to 2005.

6pm Official Launch of Book

6:15pm Wine and Canapé reception for attendees

The reception concluded at 8:30pm

Speaking about the book at the launch event, Prof. John Boland said:

> "This book provides a historical perspective of the development of Chemistry at Trinity College Dublin, from its roots in medicine to how it became a fully-fledged independent discipline that ultimately led to the establishment in 1711 of one of the first departments of chemistry in Europe. In doing so it introduces the reader to the individuals who forged this history – teachers and researchers whose curiosity, passion and drive helped shape and secure the future of chemistry at Trinity for the generations that followed. It also lays bare the many challenges now facing Chemistry at Trinity in this era of multi-disciplinarity and record levels of participation in 3rd level education."

Feedback

Attendees provided exceptionally positive feedback during the event, both in terms of the timeliness of publication of a book on the School of Chemistry and the large numbers attending the event. Many attendees particularly welcomed the opportunity to meet old friends and colleagues. After the event, several attendees sent emails to the authors congratulating them on the book and the success of the launch.

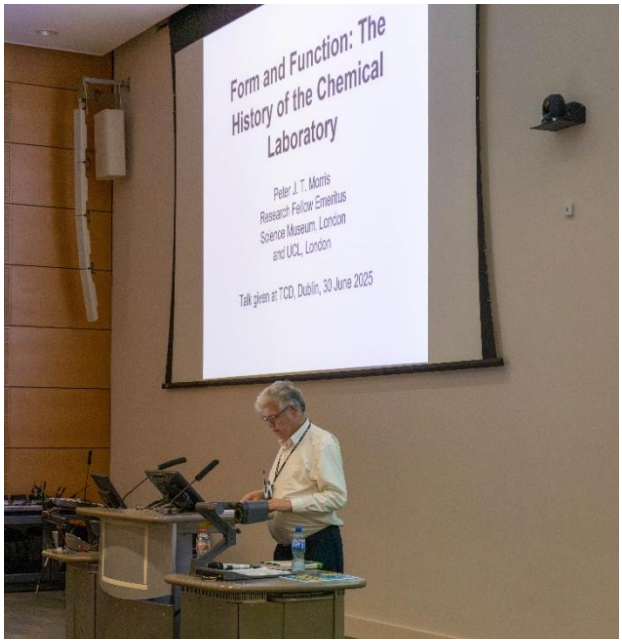


Figure 2. Professor Morris's opening lecture

Figure 3. Audience attending the opening lecture

A photo gallery is available at https://chemistry.tcd.ie/news-events/gallery/BookLaunch.php

