Irish Chemical News

A Journal of the Institute of Chemistry of Ireland

ICI Awards 2023

Prof Pat Guiry presents Awards at ICI Awards Event

Kris O'Dowd, ATU, Sligo

Prof. Yurii K. Gun'ko TCD

Countdown to ECC9 has started for July 2024

Institiúid Ceimice na hÉireann
The Institute of Chemistry of Ireland
ICI Centenary 1922-2022
Patron: Michael D. Higgins, President of Ireland
The Professional Body Representing Chemists in Ireland
Ravensdale Road, Dublin D03 CY66. Web: www.instituteofchemistry.org

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A Message from the President

Dear Fellows, Members, Graduates and Associates,

In this issue, you will find an update (plus lots of photographs) from our recently held ICI Annual Awards ceremony which preceded our AGM in University College Dublin. This featured the ICI's Boyle-Higgins Medal lecture from Professor Yurii Gun'ko of Trinity College Dublin and the ICI Postgraduate Award lecture from Kris O'Dowd of Atlantic Technological University Sligo. In addition, I was delighted to present Dr Sheila Willis with ICI's Honorary Fellowship on that occasion.

Furthermore, this issue gives a summary (plus lots more photographs) of the 74th Irish Universities Colloquium which was held in the University of Galway on June 14th and 15th. There was an excellent programme of talks from final year PhD students and well done to Dr Pau Farràs Costa as the local organiser and all of the staff from the Department of Chemistry at the University of Galway for hosting and helping. We already look forward to the 75th Irish Universities Colloquium which will be held in Trinity College Dublin.

Our ICI Annual Congress is planned for October 24th in Queen's University Belfast, and many thanks to Professor Steven Bell for his efforts in organising the speakers and venue. There is a strong list of speakers from across Ireland associated with the Congress theme of "Achieving Sustainability through Chemistry" and Associate Professor Susan Quinn will deliver her Eva Philbin Award Lecture and Professor Derek Boyd will be presented with ICI Honorary Fellowship.

Work in continuing apace on the 9th EuroChemS Congress to be held in Dublin on 7-11th July 2024 and this issue gives more details of the plenary speakers, our finalised International Scientific Committee, chaired by Professor David Leigh from the University of Manchester, and the Local Organising Committee, co-chaired by Professor Thorri Gunnlaugsson and Professor Celine Marmion. We are currently selecting our Invited Lecturers for each of the eight themes and the Call for Abstracts (for poster presentations and the possibility of being chosen to deliver an Oral Communication) is now open, closing on December 8th 2023 – see www.euchems2024.org for more details. Lots of work ahead in the coming year for many ICI members and please do support this initiative with your attendance in July!

This issue also updates on recent events in the Royal Irish Academy, from my own election as President (a humbling honour), the election of ICI Council member, Professor Mike Lyons, with super pictures from the Admittance Day and the award of the Kathleen Lonsdale Prize to Dr Chunchun Li from QUB (supervised by ICI Vice-President, Professor Steven Bell).

Many thanks to the ICI Young Chemists' Network (YCN) who continue to work hard to provide support to the younger members of our community. Seán Byrne, University College Dublin, is the ICI YCN chair and do get in contact with him if there are issues you wish to highlight or events you wish to organise.

I wish to again thank our Editor, Patrick Hobbs, who continues to enlighten our community on national and international topics that are of most interest to our community. This is a significant undertaking and is much appreciated. I do hope you enjoy reading it.

My thanks also to all Council members who voluntarily give of their time and expertise to support our Institute and community. A special thanks to you, our ICI Fellows, members, graduates and associates. Please do keep in touch and send us your updates. We would be delighted to showcase these on our ICI website and in future ICN issues.

With best regards,

Professor Pat Guiry PhD FRSC FICI PRIA

President, Institute of Chemistry of Ireland

24th September 2023

Editorial

This the third Issue of ICN this year covers the four months of May to August and hence its larger size. The cover features the Institute's Awards Ceremony in UCD and highlights the Countdown to the Institute hosting the European Chemical Congress 9 in Dublin next July which is less than a year away.

Inside three Nobel Prize Chemistry Laurates who will give plenary lectures are presented. Lists of members of the Scientific and Local Organising Committees are provided along with the overall Congress Schedule and Plenary & Convenors by Topic at ECC9 list.

The Institutes Awards Ceremony 2023 was hosted in UCD by Prof Pat Guiry. Two lectures were given during the proceedings by two of the award winners. The Post Graduate Award lecture was given by Kris O'Dowd ATU Sligo, titled "The development of Polypropylene Transparent Jerrycans for Solar Disinfection of Drinking Water; Antimicrobial Properties, Durability and Toxicity Analysis.". Kris also featured in the last Issue of ICN. The Boyle Higgins Gold Medal Lecture was given by Prof Yurii Gunko, TCD) titles "Chiral Nanomaterials". There is a short biography of Yurii included. The third lecture The Annual Awards Lecture Series (Eva Philbin) which was due to be deliver by this year's winner Prof Susan Quinn will be delivered by Susan at the Annual Congress at QUB in Belfast on September 29th. The UCD event was followed by a networking session and wine reception.

It's been a busy at the Royal Irish Academy with two Council members featuring prominently, Prof Pat Guiry elected as President of the RIA and Prof Mike Lyons elected to the RIA membership. The Kathleen Lonsdale RIA Chemistry Prize 2023 was presented to Dr Chunchun Li, QUB with Institute Vice President Prof Steven Bell, QUB present.

The 74th Irish Universities Chemistry Research Colloquium was hosted by Galway University with the organising committee chaired by Dr Pau Farràs Costa. Winners of the Oral and Poster Presentation are included with a report and photos provided by the ICI Young Chemists Network

The new ICI Young Chemists Network Committee for 2023/2024 is presented. This group of young chemists is becoming more active and have representatives from all the universities. If you are a young chemist, it's time to join the group.

Two events coming up are the Annual Congress being held in Belfast on October 24th in the Great Hall at QUB and another independent event, The All-Ireland Chemical Expo along with The Lab & Cleanroom Expo in the Leopardstown Pavillion on November 8th hosted by Premier Publishing & Events.

Updates from the Irish Research Council, SFI, IDA, Enterprise Ireland, Siliconrepublic continue in this Issue. Links to articles from Chemistry Views, ERC, CAS Insights and EuChemS including the seminar on "The Element Phosphorus" are covered.

This year is the 25th anniversary of Physical Chemistry Chemical Physics (PCCP) a prestigious RSC journal which is part owned by ICI amongst 19 Owner Societies. If you publish in this journal as an Irish researcher, the Institute gets some income for each article published. So please publish your research in this journal and support ICI.

Under the Chemistry related sections there has been a change. In the last Issue No.2 of ICN, the appointment of Prof Sylvia Draper, TCD to the Personal Chair of Material Chemistry was covered. Material Chemistry is a very important, practical, and large part of chemistry. Inspired by Sylvia's

appointment, a new Section has been added to this Issue called Material Chemistry & Science. Its size reflects the research activity and current practical applications of material chemistry and science. This period especially late August there was an explosion of excitement about room temperature superconductivity for a material labelled LK99 from South Korea. If this was verified then there are huge benefits and cost saving in technological applications where superconducting magnets are used, nuclear fusion being just one. Currently superconducting magnets must be run a very low temperatures close to absolute zero. The "popular scientific press" went hyper with articles, but the serious scientific academic press was more cautious. Reproducibility has not been proven and the search continues. Initially these articles were included in Material Chemistry & Science but as the story unfolded it was though better to place article links in an Addendum at the end of the section as Addendum 1.

This period saw more activity with solar cell advances and in particular Perovskite cells. Perovskite is a naturally occurring mineral so maybe it is time to have a look at its chemical structure outside of solar cells. Links are presented in Addendum 2 on this topic.

In the Rechargeable Battery… Section, which was very active this period, a particular publication started appearing frequently during the last few weeks. The articles reviewed rechargeable battery science and technology, which were then published as an assessment and summary in many articles/blogs. The reports or blogs were from an organisation called TS2 Space or simply TS2. Initially ignored but given their frequency they were then included with the regular links. The format was very standardised, and combined with their frequency, suggested by might be generated by an AI bott. No references or DOIs were provided. So, these were then moved into Addendum 3 so readers may evaluate them together and draw their own conclusions. The TS2 website does not indicated whether these reports were generated by Chat GPT or other LLM or a very busy human person. An effort to clarify with the publisher via their website did not get a response.

Another topic Chemistry & Artificial Intelligence has generated feeds relating to Graph Theory and Graph Data Science. This is a specialist area of data analysis and AI and finding applications in scientific and medical research so a short "Special Topic" on this is added at the end of the Chemistry & Artificial Intelligence Section.

The recently introduced Section - Science & Truth features the final round up of the Peritia Project in Brussels in May with active links to reports. This Section then continues with links covering the concerns in scientific academic publishing with fake data, retractions, resignations, fraud, predatory journals, and detection of AI generated papers.

The Peritia Project was concerned about Trust in Science and Expertise and developing policies to alleviate lack of trust. The examples in the Science & Truth section demonstrate the need for better policies and procedures to reinforcing trust and truth. The controversary around LK99 superconducting showed the danger of rushing to publication before peer review and demonstration of reproducibility.

Note 1. Regarding DOIs. Where a Digital Object Identifier (DOI) is provided in a link, the DOI is highlighted in black at the start of the text as DOI: to help visually separate it from the URL now in a deep blue colour. Previously the DOI was in a variable blue, the same as the URL and in this Issue, effort has been made for uniformity and to have one blue colour for easier reading especially if printed.

Note 2. Some DOIs especially from Nature articles are in black. Nature had been providing DOIs in plain text and not active links. Recently they changed to active links but more recently since, changed back to plain text. Reason unknown but it is inconvenient for readers. Just cut and paste if need.

Finally, a big welcome to our new Secretary, Dr Marcus Baumann MRSC, School of Chemistry, UCD who has taken on this role and becomes a member of Council. Also, a big thanks to Dr Mary Mullaghy who helped out as Secretary during the interim period while the Institute found a new person for the position following Dr Emma Coyle's resignation.

There has been some delay in publishing this Issue and since writing the Editorial the call for abstracts has become available since and have been added to this Issue. Similarly more details of the 47th Colloquium in Belfast have been updated and added.

Comments, Feedback and Responses are welcome and can be sent to the **Editor Email address: -**

editor@instituteofchemistry.org

Institute of Chemistry of Ireland (chemistryireland.org)

Patrick Hobbs MSc, FICI, CChem, CSci, MRSC.
Editor
Irish Chemical News

6th September 2023

Note: Opinions expressed in this Journal are those of the authors and not necessarily those of the Institute.

THE COUNTDOWN IS ON
Website Active
EuChemS 2024

Call for Abstracts

Call for Abstracts – EuChemS 2024

The Institute of Chemistry of Ireland (ICI) is delighted and honoured to be organising the 9th EuChemS Chemistry Congress (ECC-9). The 9th EuChemS Congress is scheduled to take place in Dublin, Ireland from 7th to 11th of July 2024. The Congress will provide an ideal platform for knowledge exchange, collaboration, and will be showcasing the latest advancements in the field of chemistry across various disciplines.

THE CALL FOR ABSTRACTS IS NOW OPEN!

We invite colleagues from the international community to submit their research abstracts to be considered for an oral communication (15 minutes) and/or poster presentation at the Congress.
Detailed instructions for submitting your abstract are available here. We encourage you to read this document before commencing the submission process. Please note that many questions are marked with an asterisk * and must be answered in order to complete your submission.
The deadline for abstract submissions is **Friday 8th December 2023.** You may amend your abstract at any point up to this deadline - however, after this date, revisions will not be possible.
We look forward to receiving your submission.
With best wishes,
Professor David A. Leigh
Chair of the International Scientific Committee,
9th EuChemS Chemistry Congress

Abstract Submission Key Dates*
Call for Abstracts Opens Monday 4th September 2023
Call for Abstracts Closes Friday 8th December 2023
Notification of Authors Friday 23rd February 2024

Submit Abstract

More information on submissions

The 9th EuChemS Chemistry Congress will have an exciting scientific programme with world-leading plenary speakers, invited speakers and short oral communications, supplemented with a series of poster presentations, focused around eight scientific themes.

Authors are invited to submit their abstracts under one of the following categories:

CONGRESS THEMES

Energy, Environment and Sustainability
Emerging Sustainable Chemistry, Technologies, Biomass Valorisation, Green Synthetic Methodologies, Circular Bioeconomy, Food

Physical, Analytical and Computational Chemistry
Machine Learning/AI

Advances in Synthetic Organic Chemistry
Asymmetric Methodology, Inorganic Methodology, Green Synthetic Methodologies

Chemistry Meets Biology For Health
Medicinal, Bioinorganic, Bioorganometallic, Radiochemistry, Food and Nutrition

Catalysis
Organometallic Catalysis, Organocatalysis, Biocatalysis, Photoredox Catalysis, Electrocatalysis

Supramolecular Chemistry
Chirality, Molecular Machines, Dissipative Systems, MOFs, Molecular Nanotopology, Sensors, Metallo-Supramolecular Chemistry, Molecular Logic, Host-Guest Chemistry, Self-Assembly Materials and Higher Order Structures

Nanochemistry/Materials
Organic and Inorganic, Material Science, Devices, Circuits, Systems, Neuromorphic Networks, and Bio-Inspired Computing

Education, History, Cultural Heritage, and Ethics in Chemistry

PLENARY SPEAKERS

Professor Dame Clare P. Grey
Energy, Environment and Sustainability
University of Cambridge
United Kingdom

Professor Véronique Gouverneur
Advances in Synthetic Organic Chemistry
University of Oxford
United Kingdom

Professor Sir David W. C. MacMillan
Catalysis
Princeton University
United States of America

Professor Omar M. Yaghi
Nanochemistry/Materials
University of California, Berkeley
United States of America

Professor Odile Eisenstein
Physical, Analytical and Computational Chemistry
CNRS – Université Montpellier
and University of Oslo
France, Norway

Professor Frances H. Arnold
Chemistry Meets Biology for Health
California Institute of Technology
United States of America

Professor Sir J. Fraser Stoddart
Supramolecular Chemistry
Northwestern University
United States of America

Professor Brigitte Van Tiggelen
Education, History, Culture Heritage,
and Ethics in Chemistry
Science History Institute
United States of America

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registration@euchems2024.org

+353 1 400 3626

www.euchems2024.org

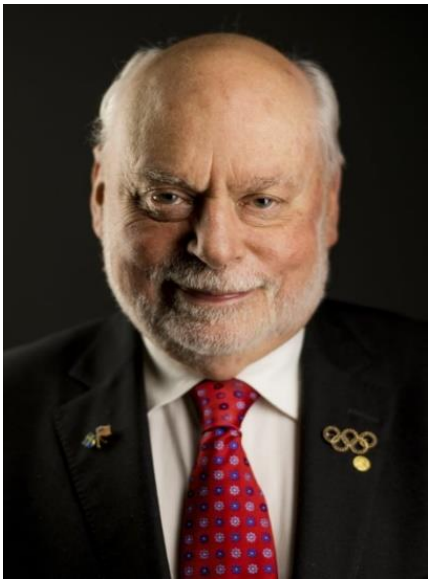
9th EuChemS Chemical Congress 2023 (ECC-9)
Conference Secretariat: Keynote PCO
Tel.: +353 1 400 3626 | Email: registration@euchems2024.org

9th EuChemS CHEMISTRY CONGRESS Dublin, Ireland 7–11 July 2024

Three Nobel Laurates will come to Dublin for the 9th EuChemS Chemistry Congress

Prof Sir James Stoddard, Northwestern University, USA

Nobel Prize in Chemistry 2016



Prize motivation: "for the design and synthesis of molecular machines"

Prise Share 1/3

A tiny lift, artificial muscles and minuscule motors. The Nobel Prize in Chemistry 2016 is awarded to Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa for their design and production of molecular machines. They have developed molecules with controllable movements, which can perform a task when energy is added. 2016's Nobel Laureates in Chemistry have taken molecular systems out of equilibrium's stalemate and into energy-filled states in which their movements can be controlled.

More Details:

Sir J. Fraser Stoddart – Facts - NobelPrize.org

Press release: The 2016 Nobel Prize in Chemistry

Prof Frances Arnold California Institute of Technology (Caltech), Pasadena, CA, USA

© Nobel Media AB. Photo: A. Mahmoud

Nobel Prize in Chemistry 2018

Prize motivation: “for the directed evolution of enzymes”

Prize share: 1/3

Frances H. Arnold, the Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry, has won the 2018 Nobel Prize in Chemistry for "the directed evolution of enzymes," according to the award citation. Directed evolution, pioneered by Arnold in the early 1990s, is a bioengineering method for creating new and better enzymes in the laboratory using the principles of evolution. Arnold shares the prize with George P. Smith of the University of Missouri in Columbia, who developed a "phage display" method for evolving proteins, and Sir Gregory P. Winter of the MRC Laboratory of Molecular Biology in Cambridge, United Kingdom, who used phage display for evolving antibodies. One half of the prize, which comes with an award of 9 million Swedish krona (about $1 million), goes to Arnold, with the other half shared by Smith and Winter.

More details:

Frances H. Arnold – Facts – 2018 (nobelprize.org)

Frances Arnold Wins 2018 Nobel Prize in Chemistry | www.caltech.edu

Prof. Dr. Sir David W.C. MacMillan, Princeton University, Princeton, NJ, USA

© Nobel Prize Outreach. Photo: Risdon Photography

Nobel Prize in Chemistry 2021

Prize motivation: “for the development of asymmetric organocatalysis”

Prize share: 1/2

Sir David W.C. MacMillan shares the 2021 Nobel Prize in Chemistry with Benjamin List for the development of asymmetric organocatalysis. The concept of catalysts – molecules that facilitate chemical reactions – derives from research conducted in the 19th century and rapidly caught on in industrial processes. “David MacMillan is a brilliant chemist whose transformative insights and accomplishments have enhanced the power of organic chemistry to benefit human health and address other practical problems,” said University President Christopher L. Eisgruber.

More Details:

David W.C. MacMillan – Facts – 2021 - NobelPrize.org

Princeton’s David MacMillan receives Nobel Prize in chemistry

9th EuChemS
CHEMISTRY CONGRESS
Dublin, Ireland 7–11 July 2024

ECC-9 INTERNATIONAL SCIENTIFIC COMMITTEE

Chair

Professor David A. Leigh – United Kingdom

Professor Patrick Guiry – Ireland – President of the Institute of Chemistry of Ireland and ECC-9 Chair

Professor Celine J. Marmion – Ireland – ECC-9 Local Organising Committee Co-Chair
Professor Thorfinnur (Thorri) Gunnlaugsson – Ireland – ECC-9 Local Organising Committee Co-Chair
Professor Artur M. S. Silva – Portugal – ECC-8 Chair
Professor Walter Leitner – Germany – Energy, Environment and Sustainability
Professor Christopher M.A. Brett – Portugal – Physical, Analytical and Computational Chemistry
Professor Bill Morandi – Switzerland – Advances in Synthetic Organic Chemistry
Professor Angela Casini – Germany – Chemistry Meets Biology For Health
Professor Martin Albrecht – Switzerland – Catalysis
Professor Stephen M. Goldup – United Kingdom – Supramolecular Chemistry
Professor Stefanie Dehnen – Germany – Nanochemistry/Materials
Professor Annette Lykknes – Norway – Education, History, Cultural Heritage, and Ethics in Chemistry
Dr. Maximilian Menche – Germany – EuChemS Young Chemists' Network Chair

9th EuChemS CHEMISTRY CONGRESS Dublin, Ireland 7–11 July 2024

ECC-9 LOCAL ORGANISING COMMITTEE

Co-Chairs:

Professor Celine J. Marmion, RCSI University of Medicine and Health Sciences
Professor Thorfinnur (Thorri) Gunnlaugsson, Trinity College Dublin
Professor Steven E. J. Bell, Queen's University Belfast
Professor John Cassidy, Technological University Dublin
Dr. Robert B. P. Elmes, Maynooth University
Dr. Odilla E. Finlayson, Dublin City University
Professor Silvia Giordani, Dublin City University
Professor Patrick Guiry, University College Dublin
Dr Sarah Hayes, University of Limerick
Patrick Hobbs, Institute of Chemistry of Ireland Council Member
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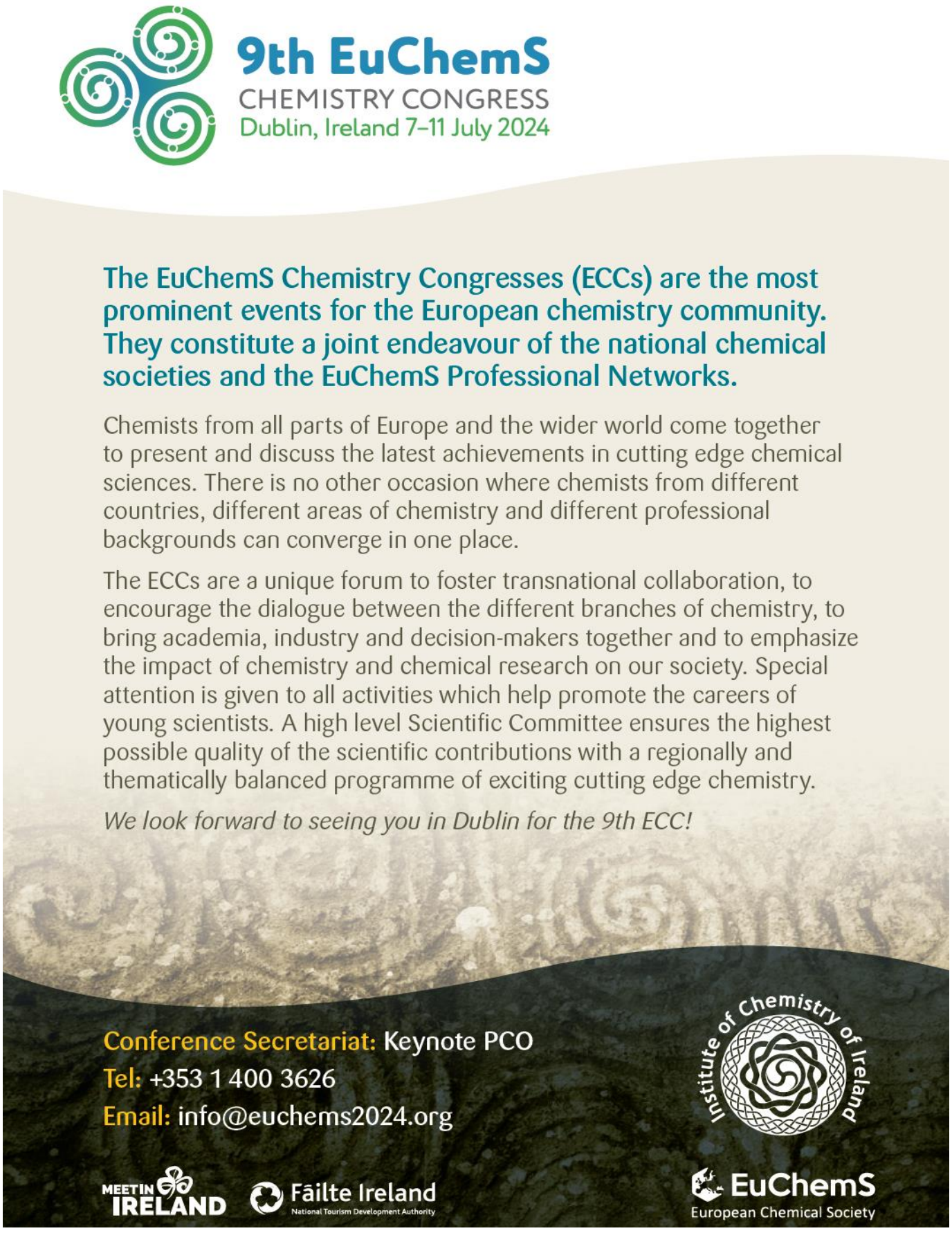
Matt Moran, Director BioPharmaChem Ireland
Professor Paul V. Murphy, University of Galway
Professor Susan J. Quinn, University College Dublin
Professor Isabel Rozas, Trinity College Dublin
Professor John Wenger, University College Cork


9th EuChemS
CHEMISTRY CONGRESS
Dublin, Ireland 7–11 July 2024
The EuChemS Chemistry Congresses (ECCs) are the most prominent events for the European chemistry community. They constitute a joint endeavour of the national chemical societies and the EuChemS Professional Networks.
Chemists from all parts of Europe and the wider world come together to present and discuss the latest achievements in cutting edge chemical sciences. There is no other occasion where chemists from different countries, different areas of chemistry and different professional backgrounds can converge in one place.
The ECCs are a unique forum to foster transnational collaboration, to encourage the dialogue between the different branches of chemistry, to bring academia, industry and decision-makers together and to emphasize the impact of chemistry and chemical research on our society. Special attention is given to all activities which help promote the careers of young scientists. A high level Scientific Committee ensures the highest possible quality of the scientific contributions with a regionally and thematically balanced programme of exciting cutting edge chemistry.
We look forward to seeing you in Dublin for the 9th ECC!
Conference Secretariat: Keynote PCO
Tel: +353 1 400 3626
Email: info@euchems2024.org
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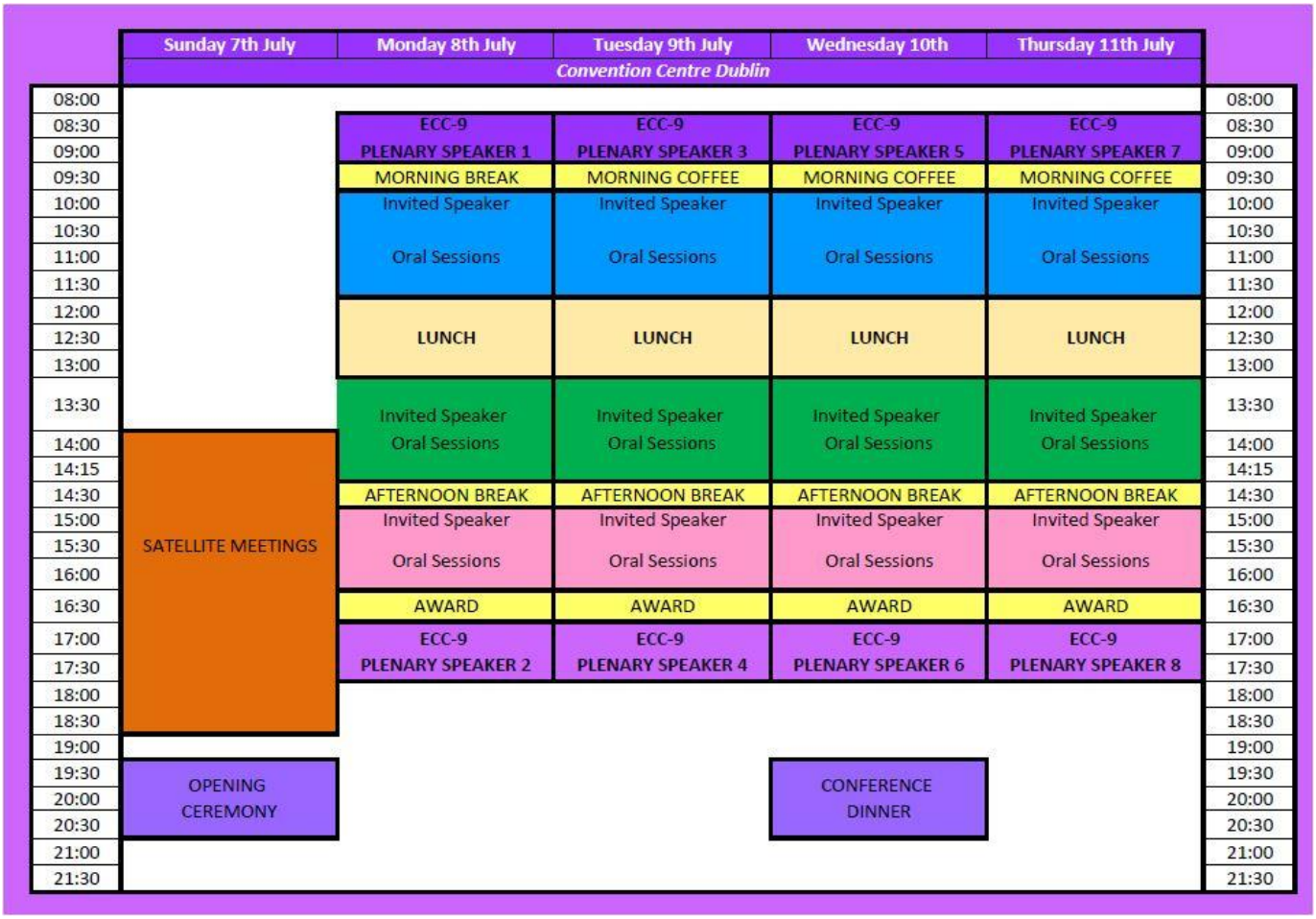
9th EuChemS Chemistry Congress – Schedule at a Glance



	Sunday 7th July	Monday 8th July	Tuesday 9th July	Wednesday 10th	Thursday 11th July	
		Convention Centre Dublin				
08:00						08:00
08:30		ECC-9 PLENARY SPEAKER 1	ECC-9 PLENARY SPEAKER 3	ECC-9 PLENARY SPEAKER 5	ECC-9 PLENARY SPEAKER 7	08:30
09:00						09:00
09:30		MORNING BREAK	MORNING COFFEE	MORNING COFFEE	MORNING COFFEE	09:30
10:00		Invited Speaker	Invited Speaker	Invited Speaker	Invited Speaker	10:00
10:30						10:30
11:00		Oral Sessions	Oral Sessions	Oral Sessions	Oral Sessions	11:00
11:30						11:30
12:00		LUNCH	LUNCH	LUNCH	LUNCH	12:00
12:30						12:30
13:00						13:00
13:30		Invited Speaker Oral Sessions	Invited Speaker Oral Sessions	Invited Speaker Oral Sessions	Invited Speaker Oral Sessions	13:30
14:00	SATELLITE MEETINGS					14:00
14:15						14:15
14:30		AFTERNOON BREAK	AFTERNOON BREAK	AFTERNOON BREAK	AFTERNOON BREAK	14:30
15:00		Invited Speaker	Invited Speaker	Invited Speaker	Invited Speaker	15:00
15:30		Oral Sessions	Oral Sessions	Oral Sessions	Oral Sessions	15:30
16:00						16:00
16:30		AWARD	AWARD	AWARD	AWARD	16:30
17:00		ECC-9 PLENARY SPEAKER 2	ECC-9 PLENARY SPEAKER 4	ECC-9 PLENARY SPEAKER 6	ECC-9 PLENARY SPEAKER 8	17:00
17:30						17:30
18:00						18:00
18:30						18:30
19:00						19:00
19:30	OPENING CEREMONY			CONFERENCE DINNER		19:30
20:00						20:00
20:30						20:30
21:00						21:00
21:30						21:30

9th EuChemS Congress (ECC-9), Dublin, Ireland, July 2024	
Energy, Environment and Sustainability (including Emerging Sustainable Chemistry Technologies, Biomass Valorisation, Green Synthetic Methodologies, Circular Bioeconomy, Food etc.)	
Plenary	Professor Dame Clare Grey
Convenor 1 (International Scientific Committee Member)	Professor Walter Leitner
Convenor 2	Professor Paul Anastas
Physical, Analytical and Computational Chemistry (including Machine Learning/AI)	
Plenary	Professor Odile Eisenstein
Convenor 1 (International Scientific Committee Member)	Professor Christopher M.A. Brett
Convenor 2	TBC
Advances in Synthetic Organic Chemistry (including Asymmetric Methodology, Inorganic Methodology, Green Synthetic Methodologies)	
Plenary	Professor Véronique Gouverneur
Convenor 1 (International Scientific Committee Member)	Professor Bill Morandi
Convenor 2	Professor Mariola Tortosa
Chemistry Meets Biology For Health (including Medicinal, Bioinorganic, Bioorganometallic, Radiochemistry, Food & Nutrition)	
Plenary	Professor Frances H. Arnold
Convenor 1 (International Scientific Committee Member)	Professor Angela Cassini
Convenor 2	TBC
Catalysis (including Organometallic Catalysis, Organocatalysis, Biocatalysis, Photoredox Catalysis, Electrocatalysis)	
Plenary	Professor Sir David W.C. MacMillan
Convenor 1 (International Scientific Committee Member)	Professor Martin Albrecht
Convenor 2	Professor Montse Dieguez
Supramolecular Chemistry and Stereochemistry (including Chirality, Molecular Machines, Dissipative Systems, MOFs, Molecular Nanotopology, Sensors, Metallo-Supramolecular Chemistry, Molecular Logic, Host-Guest Chemistry, Self-Assembly Materials, Higher Order Structures)	
Plenary	Professor Sir J. Fraser Stoddart
Convenor 1 (International Scientific Committee Member)	Professor Steven Goldup
Convenor 2	Professor Nathalie Katsonis
Nanochemistry/Materials (including Organic, Inorganic, Material Science, Devices, Circuits, Systems, Neuromorphic Networks, Bio-inspired Computing)	
Plenary	Professor Omar M. Yaghi
Convenor 1 (International Scientific Committee Member)	Professor Stefanie Dehnen
Convenor 2	TBC
Education, History, Cultural Heritage, and Ethics in Chemistry	
Plenary	Professor Brigitte Van Tiggelen
Convenor 1 (International Scientific Committee Member)	Professor Annette Lykknes
Convenor 2	TBC

Check website for updates: EuChemS 2024

We wish to thank the Institute following sponsors/exhibitors.

ICI Awards Ceremony & AGM 29th June

The ICI Annual Awards Ceremony was held at UCD's Theatre C (O'Connor Theatre), Science Hub, UCD
On June 29th. It was preceded by a Council meeting where the new Chair of the ICI Young Chemists Network Sean Byrne was co-opted on to Council as the YCN representative.

Sean Byrne PhD student UCD, Chair ICI YCN

The **Awards Ceremony** followed immediately after the Council meeting.

Postgraduate Award 2023

The first award was the ICI Postgraduate Award. This years award winner was Kris O'Dowd, Atlantic Technological University, Sligo. Kris gave an interesting lecture on his work titled:

"The development of Polypropylene Transparent Jerrycans for Solar Disinfection of Drinking Water; Antimicrobial Properties, Durability and Toxicity Analysis."

This was presented to him after his lecture by Prof Pat Guiry, ICI President:

Boyle Higgins Gold Medal Award 2023

The Institute's most prestigious award, the Boyle Higgins Gold Medal was awarded Professor Yurii Gunko, TCD. His lecture was titled "Chiral Nanomaterials". An excellent speaker his lecture was delivered in an engaging and entering manner.

Prof Yurii K. Gun'ko has an impressive career. He optained his PhD from Moscow State University, Russia in 1991. This followe with lectureships in Belarus, UK, Germany before coming to Dublin in 1999. He is a winner of many awards, an invited speaker at over 90 talks, holds 14 patents, published over 380 papers and 12 book chapters. He has 2 licenses which have been licensed to companies in Ireland. For his innovation activities, Prof. Gun'ko was awarded Enterprise Ireland Commercialisation Award. He is a member of Chemical Safety Subcommittee in Food Safety Authority of Ireland.

Awards

Alexander von Humboldt Award – 1995
Fellow of Trinity College – 2005.
Fellow of Royal Society of Chemistry – 2007
Enterprise Ireland Commercialisation Award – 2008
Ikerbasque Research Fellowship Award (Visiting Professorship), San Sebastian, Spain, - 2011
International Association of Advanced Materials Medal - 2016
Member of Royal Irish Academy – 2019

Research areas

Research expertise areas include Materials Chemistry, Nanomaterials synthesis and functionalisation and Nanobio-technology. Main research interests are:
-Quantum dot, based materials for photonics, photovoltaics, biological imaging and sensing applications
-Plasmonic nanomaterials for sensing and catalysis.
-Magnetic nanomaterials for magnetic activation and biomedical applications.
-Carbon nanomaterials and 2D nanomaterials.
-Polymer composites

Prof. Gun'ko has raised over € 10 million in research funding on his own behalf as a principal investigator (PI) and have participated in the raising of over € 27 million in various collaborative projects.

Teaching

During his stay in the School of Chemistry, Trinity College (since 1999– to date) Prof. Gun'ko has developed and teaches the following lecture courses to all levels of students.
Postgraduate lecture courses: -IR and Raman Spectroscopy, -Synthesis of Nanomaterials, -Synthesis and functionalisation of nanoparticles for biomedical applications, -Photovoltaics.
Undergraduate lecture courses: Advanced Inorganic Materials Chemistry, Advanced Organometallic Chemistry, Main Group Organometallics, Aspects of Inorganic Chemistry, Topics in structural Chemistry, - Inorganic Polymers-Organometallics, Transition Metal Organometallics, Homogeneous catalysis, Nuclear and Inorganic Medicinal Chemistry, Chemistry of Main Group Elements.
Lab supervision: JF Chemistry practical labs; SF Inorganic Chemistry practical labs; JS Inorganic & Organometallic Chemistry practical labs; JS Advanced Materials (20-30 students) - Advanced Materials practical labs.

Mentoring & research supervision

To date Prof. Gun'ko has directly supervised 28 post-doctoral researchers; 36 postgraduate students have successfully completed their PhD degrees (+3 students completed their Research MSc degree) under his direct supervision. Y. Gun'ko is currently supervising 5 postgraduate students and 4 post-doctoral fellows. In addition, he has supervised over 140 final year undergraduate and visiting student research projects.

Service to College

Director of Undergraduate Teaching and Learning for Chemical Sciences in TCD (2020 to date), Head of Inorganic and Materials Chemistry discipline a member of the School Executive (2011 –2017), Director of Research in the School of Chemistry (2009-2011), Director of the degree course Physics and Chemistry of Advanced Materials (PCAM, now NPCAM) during the period 2003-2005. College Tutor 2003-2012.

Engagement with Discipline/Society
Editorial board member: Scientific reports (Nature group), Nanomaterials (MDPI) and Applied Sciences (MDPI).

Scientific Advisory board member: *Journal of Materials Chemistry B*

Panel member: Advanced ERC grants, ITN Marie Curie grants, IF Marie Curie grants, etc.

Reviewer for: ERC grants, Marie Curie ITN, ESF EU, ERA NET, SEMAPHORE, U.S. Department of Energy, Enterprise Ireland grants and many others.

Referee for: Science, Nature Nanotechnology, Nature Communications, Nature Methods, Nature protocols, Scientific Reports, Journal of the American Chemical Society, Advanced Materials, Advanced Functional Materials, Nano Letters, ASC Nano, Angewandte Chemie, Chemical Communications, Journal of Materials Chemistry, etc.

Annual Lecture Series (Eva Philbin) Award was awarded to Professor Susan Quinn UCD who could not attend this year's Award Ceremony but will deliver her lecture at The Annual Congress in Queens, Belfast on September 29th.

Networking and Reception

Following the Awards Ceremony, the Institute hosted a networking session and wine reception to make new contacts and catch up with old friends.

Honorary Fellows at AGM

Prof Pat Guiry, President ICI congratulates:

Dr Sheila Willis (formerly head of State Forensics Lab)

and

Professor Derek Boyd (Professor Emeritus of Organic Chemistry, QUB).

On their appointments as honorary members of the Institute.

Royal Irish Academy

The Kathleen Lonsdale RIA Chemistry Prize 2023

Dr Chunchun Li QUB centre with Prof Patrick Guiry UCD, President ICI & Prof Stephen Bell QUB, Vice President ICI

Dr Chunchun Li is awarded the Kathleen Lonsdale RIA Chemistry Prize for best chemistry PhD thesis in Ireland at a ceremony at the Royal Irish Academy on Thursday 11 May. The prize was awarded in an in-person ceremony for the first time since 2020.

The Kathleen Lonsdale RIA Chemistry Prize 2023 was awarded to Queen's University, Belfast PhD student Dr Chunchun Li for research into understanding and controlling the surface properties of nanomaterials

Dr Chunchun Li, a recent PhD graduate of Queen's University Belfast, has been awarded the 2023 Kathleen Lonsdale RIA Chemistry Prize. This prestigious prize is named in honour of the famous Irish x-ray crystallographer Kathleen Lonsdale.

Dr Li's PhD research focused on understanding and controlling the surface properties of nanomaterials. Understanding how the surfaces of nanomaterials interact with the environment and chemical substances in the environment is key to designing nanomaterials for use in applications such as sensing and catalysis. The principal technique Dr Li used to understand and control nanosurfaces was surface-enhanced Raman spectroscopy (SERS) which can give useful information on interactions on nanomaterials' surfaces. Dr Li showed that the nanomaterials she developed could be used for SERS sensing for pollutants, pharmaceuticals and illegal drugs. The new discoveries in her research allowed her to build sensors with enormously enhanced performance for therapeutic monitoring of anticancer drugs. The technique is suitable for a wide variety of monitoring applications for in situ

water, environmental and biological analysis. Dr Li described her reaction to the news that she had been selected for the Kathleen Lonsdale RIA Chemistry Prize 2022:

I am very excited and honoured to receive the prestigious Kathleen Lonsdale Prize from the Royal Irish Academy. I first heard of the prize in the second year of my PhD.At the time I also learnt about Dr Kathleen Lonsdale, who became one of my inspirations as a woman in science. Therefore, being awarded this prize is extremely special to me, since it is not only a testament to my efforts during my PhD but also a huge confidence boost for me to continue to pursue even bigger goals in my research in the future.

Watch the ceremony on YouTube at https://youtu.be/DNGlTXPUvGc

The Royal Irish Academy works each year with the expert members of the Physical, Chemistry and Mathematical committee to select a winner based on the most outstanding Irish PhD thesis in the general area of the chemical sciences.

The prize, kindly sponsored by Henkel, includes an award of €2,000. The winner will also be nominated by the Physical, Chemical and Mathematical Sciences Committee to compete amongst the top young chemists in the world in the IUPAC-SOLVAY International Award for Young Chemists.

SCIENCE COMMITTEESPHYSICAL, CHEMICAL AND MATHEMATICAL SCIENCES COMMITTEEGRANTS AND AWARDS

Royal Irish Academy

Professor Pat Guiry BSc, PhD. FRSC, FICI. RIA President, UCD, current President of ICI elected as President of RIA

At their Stated General Meeting in March, the Members of the Royal Irish Academy voted Professor Pat Guiry UCD as their 58th President.

Professor Guiry who is Full Professor of Synthetic Organic Chemistry and Director of the Centre for Synthesis and Chemical Biology in University College Dublin, will replace the outgoing President Dr Mary Canning effective immediately. We thank Dr Canning for her service to the Academy during her three-year term.

Professor Guiry was elected to membership in 2013 and has been an active Member, serving the Academy on Council from 2015 to 2020 with specific roles as Science Secretary, a member of the Executive and Policy and Oversight Committees from 2016 to 2020.

Professor Guiry commented:

'As President it will be my privilege to work with members, officers and staff to promote the Academy as an independent, all-island learned society that provides expert scholarly advice to inform policy and civic society, responding in a flexible/timely manner to the ever-changing (inter)national research/education environment, with a particular focus on the research funding of STEM and the Arts, Humanities and Social Sciences. I also endeavour to strengthen the presence of the Academy throughout the island of Ireland with North-South and East-West initiatives, deepening our links with sister Academies in the UK and continuing to benefit from the participation of the Academy's experts in European and global networks and alliances. I will lead the development of the Academy's 2024-2029 Strategic Plan, continuing to embed EDI into all aspects of activities, and will strengthen the Academy's financial sustainability to achieve its strategic goals. I look forward to engaging with recently appointed Members and supporting the work of the newly established Young Academy of Ireland.'

Royal Irish Academy

Admittance Day 2023

In May 28 recently elected Members were officially admitted during our ceremony today for their exceptional contributions to the sciences, humanities, and social sciences, as well as to public service.

Our 2023 newly elected Members include Danny McCoy, Chief Executive Officer of Ibec; Political sociologist Professor Katy Hayward known for her work on the impact of Brexit; peace and equality champion Emeritus Professor Monica McWilliams; pioneering weather and climate modeller Professor Tim Palmer; one of the world's top ten coastal management researchers Professor Andrew Cooper; globally recognised leader in manufacturing research and education Professor Fengzhou Fang; Professor Raffaella Folli, Linguist and former Provost of Ulster University Jordanstown campus.

Pat Guiry, President of the Royal Irish Academy, said:
'These individuals, elected by their peers, have made exceptional contributions in their fields of endeavour. We are delighted to recognise their achievements. As Members of the Academy, they will support the RIA by engaging and leading in activities that strengthen the international recognition of the Academy's scholarship and serve the public good through their knowledge and insight.

Today marks another step forward in our commitment to diversity of our Membership with 15 women elected. We have also enhanced the overall diversity of our multi-disciplinary committees and earlier this year we launched Young Academy Ireland providing new impetus to the life and work of the Academy as part of our strategic goal to build a modern Academy.'

In the Sciences

Professor Louise Allcock*, University of Galway; Professor Siobhán Clarke, Trinity College Dublin; Professor Andrew Cooper, Ulster University; Professor Fengzhou Fang, University College Dublin; Professor John Laffey*, University of Galway; Professor Chris Lynch, University College Cork; **Professor Mike Lyons**, Trinity College Dublin; Professor James O'Donnell, Royal College of Surgeons in Ireland; Professor Sinéad Ryan, Trinity College Dublin; Professor John Walsh, University College Dublin.

Professor Michael Edward Gerard Lyons Council Member ICI, elected to the Royal Irish Academy

BSc (NUI, 1979), PhD (NUI, 1883), MA (Dubl 1988), ScD (Dubl 2021)
Mike Lyons Professor in Physical Chemistry TCD

Member, Science Elected in 2023

Biography
Professor Michael Lyons

Mike Lyons is Professor in Physical Chemistry, a Senior Fellow of Trinity College Dublin, and an elected member of the Royal Irish Academy.

He served as Head School of Chemistry for a six-year period (2017-2023). He is a PI in the Centre for Research on Adaptive Nanostructures and Nanodevices (CRANN), and in the SFI funded AMBER National Centre, Trinity College Dublin.

Born in Cork city he was educated in CBC Cork and is a graduate of University College Cork (1979) where he read Chemistry and Mathematical Physics. Mike obtained his PhD degree from the same University in 1983 under the supervision of the late Prof. Declan Burke in metal oxide electrochemistry. He worked with the late Prof. John Albery FRS and Prof. Brian Steele at Imperial College London on metal oxide electro-catalysis before being appointed to a lectureship in Physical Chemistry at Trinity College Dublin in 1984.

He was elected to Fellowship, Trinity College Dublin (FTCD), in 1992 based on publication and research. His research interests encompass Physical and Analytical Electrochemistry and nanomaterials, and in a publication output of two books and more than 170 papers, he has made significant contributions to electrode kinetics, metal oxide electro-catalysis, electroactive polymer electrochemistry, mathematical modelling of electrochemical systems, electrochemical biosensors, and carbon nanotube electrochemistry. In 2021 Mike was conferred with the Doctor in Science Degree (ScD) by the University of Dublin based on a corpus of published research and scholarship. In the

same year, he was also elected as a Fellow of the Institute of Chemistry of Ireland (FICI) and currently serves as a member of Council.
Mike was elected member of the Royal Irish Academy (MRIA) in 2023 for a corpus of internationally recognised research in interfacial electrochemistry, and in particular for combining experiment and theoretical modelling. He has made seminal contributions to understanding electrochemical water splitting, magneto-electrochemistry and chemically modified electrodes.

Mike leads the Trinity Physical and Materials Electrochemistry Group, which is currently engaged in developing novel nanomaterials for use as catalysts in water electrolysis and fuel cell devices for use in energy conversion and storage device applications. The group is also developing non enzymatic electrochemical biosensors based on metal oxide modified electrodes for bio-diagnostic applications and for pH sensing and in developing anode materials for metal electro-winning for the mining industry.
He previously led TCD activity in the field of Raw Materials within the EIT Raw Materials KIC a multinational EU funded initiative involving industry, research institutes and academia. Professor Lyons has lectured extensively in UK, Europe, US, Latin America, Pakistan, India, Australia and New Zealand. He has received significant research funding both from National sources (SFI, EI), the EU and Multinational Industry (DuPont, National Power).

A major research emphasis at the present time is in the mathematical modelling of bounded reaction/diffusion equations of interest in catalytic reactors, amperometric enzyme biosensors and bio-fuel cells. This work is being done in collaboration with Prof. L Rajendran, AMET University, Chennai, India. Current experimental projects include Ni/Fe oxyhydroxide materials for alkaline water electrolysis.
In his spare time Mike follows Irish & Munster Rugby (although he will on occasion cheer on Leinster) and Cork Hurling. He enjoys classical music, escapist movies, and is an avid reader of history and popular science books.

Admittance Day 2023

Sciences: 6 of the elected members

Professor Louise Allcock*, University of Galway; Professor Siobhán Clarke, Trinity College Dublin; Professor Andrew Cooper, Ulster University; Professor Fengzhou Fang, University College Dublin; Professor John Laffey*, University of Galway; Professor Chris Lynch, University College Cork; Professor Mike Lyons, Trinity College Dublin; Professor James

O'Donnell, Royal College of Surgeons in Ireland; Professor Sinéad Ryan, Trinity College Dublin; Professor John Walsh, University College Dublin

Most of RIA's 28 recently elected Members were officially admitted during a ceremony for their exceptional contributions to the sciences, humanities and social sciences, as well as to public service.

Honorary Members

Professor Gráinne de Búrca, New York University; Professor Patrick Griffin, University of Notre Dame; Professor Dr. Rudolf Krska, University of Natural Resources and Life Sciences, Vienna; Professor Máire Ní Mhaonaigh, Cambridge University; Professor Tim Palmer, University of Oxford; Professor Gordon Wallace*, University of Wollongong

The Institute of Chemistry of Ireland
is delighted to announce the call for nominations for the following prestigious ICI award:
The ICI Boyle Higgins Gold Medal and Lecture Award 2024

The Boyle Higgins Gold Medal and Lecture Award 2023

The Boyle Higgins Gold Medal and Lecture Award, instituted in 1985, is an award for research work carried out in chemistry under the headings: (a) Pure Chemistry, (b) Applied and Industrial Chemistry or (c) Chemical Education. The award recognizes a chemist **of any nationality working in Ireland or a chemist who is an Irish citizen working overseas** who has made **an outstanding and internationally recognized research contribution to the advancement of chemistry.** A person nominated for this award must be a member of the Institute at the time of nomination or upon receipt of the award.

Nomination process: The nominator shall indicate in writing to the President of the Institute the category which applies to their nominee, and they shall submit by email one electronic copy which will include a brief statement outlining the reasons for the nomination, together with a CV (maximum 3 pages) of the nominee. Nominations will be externally reviewed by at least two independent referees, who are recognized experts in the category and who are not nominators.

Nominations to be addressed to the ICI President, Professor Pat Guiry and sent by email to: p.guiry@ucd.ie and secretary@instituteofchemistry.org

ICI website: http://www.chemistryireland.org

Closing date of Friday December 1st, 2023

Recent Past Recipients

- **2023** Professor Yurii Gunko (Nano materials)
- **2022** Professor Grace Morgan (Pure Chemistry)
- **2021** Professor Tadhg Begley (Pure Chemistry)
- **2020** Professor Amilra P. de Silva (Applied Chemistry)
- **2019** Professor Suresh Pillai (Applied Chemistry)
- **2018** Professor John Kelly (Applied Chemistry)
- **2017** Professor Henry Curran (Applied Chemistry)
- **2016** Professor Kieran Hodnett (Applied Chemistry)
- **2015** Professor Dermot Diamond (Applied Chemistry)
- **2014** Professor Pat Guiry (Pure Chemistry)
- **2013** Doctor Sheila Willis (Applied Chemistry)
- **2012** Professor Malcolm R. Smyth (Applied Chemistry)
- **2011** Professor Frank Hegarty (Pure Chemistry)
- **2009** Professor Seán Corish (Pure Chemistry)
- **2008** Professor Albert Pratt (Pure Chemistry)
- **2007** Professor Rory More O'Ferrall (Pure Chemistry)
- **2005** Professor Donald Fitzmaurice (Pure Chemistry)
- **2002** Doctor John F. O'Sullivan (Applied Chemistry)
- **2000** Professor Dervilla M.X. Donnelly (Pure Chemistry)

The Institute of Chemistry of Ireland

is delighted to announce the call for nominations for the following prestigious ICI award:

The ICI Annual Award for Chemistry (Eva Philbin Public Lecture Series) 2024

This award is for a practising chemist, who has made a significant contribution to the advancement of chemistry and has considerably raised the profile of chemistry through both the excellence of their work and their ability to communicate in an effective and lucid manner. **The recipient must be a Chemist of any nationality working in Ireland.** They will present lectures in three locations in Ireland (including Dublin), which will be open to the public. A person nominated for this award must be a member of the Institute at the time of nomination or upon receipt of the award.

Nomination process: The nominator shall send one electronic copy of their nomination by email to the President of the Institute, Professor Pat Guiry (p.guiry@ucd.ie), which will include a cover letter providing a brief statement outlining the reasons for the nomination, together with a CV (maximum 3 pages) of the nominee. Nominations for this award will be externally reviewed. Please note that self-nominations are also allowed.

Nominations to be sent by email to the ICI President, Professor Pat Guiry at: p.guiry@ucd.ie and secretary@instituteofchemistry.org

Closing date of Friday December 1st, 2023

ICI website: **http://www.chemistryireland.org**

Past Recipients

- **2005** Professor David A. Leigh
- **2006** Professor A. Prasanna de Silva
- **2007** Dr Mary Archer
- **2008** Professor Peter Atkins
- **2009** Professor Martyn Poliakoff
- **2011** Dr Malachy McCann
- **2012** Professor Lesley Yellowlees
- **2013** Professor Herbert W. Roeskey
- **2014** Professor Thorfinnur Gunnlaugsson
- **2015** Professor Michael J. Zaworotko
- **2016** Professor John Sodeau
- **2017** Professor Donal O'Shea
- **2018** Professor Anita Maguire
- **2019** Professor Declan McCormack
- **2020** Professor Declan Gilheany
- **2021** Professor Paula Colavita
- **2022** Professor Carmel Breslin
- **2023** Professor Susan Quinn

The Institute of Chemistry of Ireland

is delighted to announce the call for nominations for the following prestigious ICI award:

The ICI Postgraduate Award for Chemistry 2024

The nominee must be **a registered PhD student in any Chemistry discipline working in an Irish Higher Education Institution**. They must have demonstrated excellence in research through publications. They must also have demonstrated a commitment to supporting and promoting Chemistry within their Institution (e.g., through active participation in public engagement initiatives). A person nominated for this award must be a member of the Institute at the time of nomination or upon receipt of the award.

Nominations to be addressed to the ICI President, Professor Pat Guiry and sent by email to: p.guiry@ucd.ie and secretary@instituteofchemistry.org

ICI website: http://www.chemistryireland.org

Closing date of Friday December 1st, 2023

ICI Postgraduate Awardees to Date:

2023: Kris O'Dowd (Atlantic Technical University Sligo)
2022: Dr Niamh O'Mahoney (UCC) (Supervisor: Dr Dara Fitzpatrick)
2021: Dr Ioannis Mylonas Margaritis (NUIG) (Supervisor: Dr Constantina Papatriantafyllopoulou)
2020: Dr Priyanka Ganguly (Sligo IT) (Supervisor: Professor Suresh Pillai)
2020: Dr Conor Crawford (UCD) (Supervisor: Professor Stefan Oscarson)
2019: Dr Saoirse Dervin (Sligo IT) (Supervisor: Professor Suresh Pillai)
2018: Dr Adele Gabba (NUIG) (Supervisor: Professor Paul Murphy)

Book of Abstracts is available here: 648aec482286c967700927 (clr.events) provided or here at:

https://universityofgalwayschoolofbiologicalandchemicalsciences.clr.events/attachment/648aec482286c967700927

Below is the overall agenda as previously provided in Issue 2

Agenda: June 14th

8.45 - 9.10 **Participant Registration**

9.10 - 9.30 **Conference Opening, Theatre IT250**
Professor Pat Guiry, President, Institute of Chemistry of Ireland Professor Paul Murphy, School of Biological and Chemical Sciences, University of Galway

9.30 - 10.30 **Prof Helen Blanchard, University of Galway, Theatre IT250**
Designing inhibitors that target disease-promoting carbohydrate-recognising proteins Plenary Lecture

10.30 - 11.00 **Tea/Coffee, Mounting of Posters**

11.00 - 12.15 **Organic Synthesis (Chair: XXX) | Materials 1 (Chair: XXX)**
Theatre D (Sponsored) Organic Synthesis (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 Theatre E (Sponsored) Materials 1 (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4

12.15 - 13.30 **Reaction Mechanism (Chair: XXX) | Materials 2 (Chair: XXX)**
Theatre D (Sponsored) Reaction Mechanism (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 Theatre E (Sponsored) Materials 2 (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4

13.30 - 14.30 *Lunch (Local Outlets)*

14.30 - 15.15 **Dr Miguel Manzano García, Universidad Complutense de Madrid, Theatre IT250**
Mesoporous Silica Nanoparticles for Nanomedicine Plenary Lecture

15.15 - 15.45 **Being a publisher in the digital era, Theatre IT250**
xxx Plenary Lecture “Round table” MacMillan Publishers, xxx?

15.45 - 17.00 **Biological Activity & Chemical Imaging**
Theatre D (Sponsored) Biological Activity (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 Theatre E (Sponsored) Chemical Imaging (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4

17.00 - 17.30 *Tea/Coffee, Viewing of Posters, Presentation by Almac about Careers*

17.30 - 19.00 **Poster Session with associated Drinks reception**
Sponsored by the Royal Society of Chemistry, Local Section 5.30 – 6.15 Even-Numbered Posters; 6.15 – 17.00 Odd-Numbered Posters

19.00 - 22.00 **Dinner: BBQ at Sult** Sponsored

June 15th

9.30 - 10.15 **Prof Carlo Cavallotti, Politecnico di Milano, Theatre IT250**
From Qualitative to Quantitative Predictions in Theoretical Gas Phase Chemical Kinetics: Fundamental Aspects and Examples Plenary Lecture

10.15 - 11.00 **Flow Chemistry (Chair: XXX) | Medicinal Chemistry (Chair: XXX)**
Theatre D (Sponsored) Flow Chemistry (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 theatre E (Sponsored) Medicinal Chemistry (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4

11.00 - 11.30 *Tea/Coffee*

11.30 - 13.15 **CO2 Chemistry (Chair: XXX) | Therapeutic Agents (Chair: XXX)**
Theatre D (Sponsored) CO2 Chemistry (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 speaker 5 Theatre E (Sponsored) Therapeutic Agents (Chair: XXX) Speaker 1 Speaker 2 Speaker 3 Speaker 4 Speaker 5

13.15 - 13.30 **Closing: Professor Paul Murphy**
Prize Giving: Professor Pat Guiry (Prizes - Sponsored)

Colloquium Organising Committee:

Academic staff co-organisers: Pau Farràs Costa (Chair), Mihai Lomora, Binh Mai and Chong-Wen Zhou.

Student co-organisers: Darragh McHugh, Lamis Alaa Eldin, Aaron McCormack, Federica Brescia, Levente Nagy, Rakesh Kumar, Hanka Besic, Reshma Kidayaveettil, Muhammad Sohail Riaz and Praveen Kumar.

Colloquium Report from the ICI Young Chemists' Network (ICI YCN)

The #74th Irish Chemistry Colloquium, under the aegis of the Institute of Chemistry in Ireland was held in the University of Galway on the 14th and 15th of June. ⚗

Congratulations to all speakers who gave great talks and presentations on the cutting-edge chemical research taking place on the #island of Ireland. We would like to congratulate the winner of the ICI Postgraduate Award, Kris O'Dowd of Atlantic Technological University Sligo, who gave his talk on the development of polypropylene transparent jerry cans for solar disinfection of drinking water. Along with all those who won prizes at the event. The prize winners covered various chemical disciplines and showcased the exceedingly high standard of #chemicalresearch on the island.

📣 Oral Presentation:

Clara Zehe – University College Dublin
Aoife Carroll – University College Cork
Sean McKenna – Trinity College Dublin
Robyn Kehoe – University College Cork

📊 Poster Presentation:

Wiktoria Brytan - University of Limerick
Bhargava Reddy Mandapati - University College Dublin
Celine Erkey – University College Dublin
Karlijn Hertsig – Trinity College Dublin
Emma McCrea – Queen's University Belfast
Ryan Madden – Dublin City University
EURACHEM Oral Presentation: Mark Young – Queen's University Belfast
EURACHEM Poster Presentation: Pedro De Souza Borges – Maynooth University
Popular Vote Oral Presentation: Jack Bennett – University of Galway
Popular Vote Poster Presentation: Keith O'Shaughnessy – University College Cork

On behalf of the ICI YCN we would like to sincerely thank Prof. Pau Farràs and his team for organizing the colloquium and all researchers for their interaction over the course of the event. 👨‍🔬

Finally, we would like to congratulate Alex Grant from University College Cork, the winner of our "Guess the Molecular Weight" competition, whose prize is currently out for delivery.

74th Colloquium 2023 Prize Giving Galway

Presented by Prof Pat Guiry President of ICI

Bhargava Reddy Mandapati UCD

Celine Erkey UCD

Emma McCrea UCD

Rian O'Madain DCU

Clara Zehe UCD

Aoife Carroll UCC

Sean McKenna TCD

Robyn Kehoe UCC

Mark Young MU

Keith O'Shaugnessy UCC

Jack Bennett UG


47th Annual ICI Congress
24th October 2023
The Great Hall,
Queen's University Belfast
Theme:
"Achieving Sustainability
Through Chemistry"

47TH Annual ICI Congress

Tuesday 24th October 2023
The Great Hall, Queen's University Belfast

Following on from last year's very successful Centenary Congress, the theme of this year's Congress will be:

"Achieving Sustainability Through Chemistry"

We will have invited speakers from institutions right across Ireland presenting their work, which will highlight the strength and depth we have in sustainability research right across the island.

Young researchers are particularly encouraged to attend. We will have both favourable registration rates and a poster session. In addition, there will be opportunities to give "elevator pitches" describing the research in the posters one or two minutes.

The timing of the meeting will be set to synchronise with the Dublin-Belfast Enterprise Express train service to allow easy travel for at least some of our attendees.

Further details on the programme and registration will both be posted on the ICI web site:

https://www.chemistryireland.org/awards-events/#congresses

and circulated by mid- September 2023.

47TH Annual ICI Congress

Tuesday 24th October 2023
The Great Hall, Queen's University Belfast

Preliminary Programme

10.45-11.10 Tea and Coffee / Registration

11.10- 11.15 Welcome: **Professor Steven Bell, Vice-President, Institute of Chemistry of Ireland**

11.15-11.45 Professor Peter Nockemann, Queen's University Belfast
"*Sustainable Recycling of Rare Earth Metals – From Fundamentals to Application"*

11.45-12.15 Professor Kevin Ryan, University of Limerick,
"*Driving Increases in Energy Density in Li-ion and Beyond Li-ion Batteries for Electric Vehicles and Stationary Storage using Alloying Anodes"*

12.15 -12.45 Professor Fiona Regan, Dublin City University
"Lab-on-a-Disc: Transforming How Chemical Pollutants Can Be Monitored in the Aquatic Environment"

12.45- 13.30 Lunch

13.30- 13.45 Award ceremony**: Presentation of Honorary ICI Fellowship to Professor Derek Boyd**

13.45- 14.15 ICI Annual Award for Chemistry (Eva Philbin Lecture Series) 2023- Professor Susan Quinn, University College Dublin
"Adventures in DNA: Exploring New Avenues for Light Activated Diagnostics and Therapeutics"

14.15- 14.45 Dr Marcus Baumann, University College Dublin
"Continuous Flow Chemistry - From Improving Known Reactions to the Discovery of New Reactivity"

14.45-15.15 Elevator pitches - early career researchers.

15.15- 15.45 Professor Pilar Fernandez-Ibanez, University of Ulster
"Photoelectrocatalysis to Address Emerging Pollutants and Pathogens in Aquatic Environment: From the Lab to the Real World"

15.45-16.45 Poster session and mixer

16.45- 17.00 Poster Prize Presentation and Closing Remarks: **Professor Pat Guiry, President, Institute of Chemistry of Ireland**

Registration details

Registration closes 10/10/23

Registration Fees

ICI Member	**£45**
Non-member	**£70**
Student/post-doc	**£30**

The student registration fee will include a voucher, which can be used to cover the cost of one year's subscription fee for membership of the ICI.

Payment will be collected through the following link:

47th ICI Annual Congress (qub.ac.uk) or copy & paste to browser:
https://ecommerce.apps.qub.ac.uk/osici/catalog/index.php

This App asks you to provide your name and contact details before choosing which category of registration you require and asking for credit card details. A range of different credit cards are acceptable.

Posters
Students or ECRs who wish to present a poster should send the title of the poster to s.bell@qub.ac.uk by 10/10/23. Poster boards are approximately 120 cm x 120 cm.

Dietary Requirements
Delegates with dietary requirements are asked to note this in the dedicated section of the registration app.

Updates and revisions to the programme will be posted on the ICI website:

Institute of Chemistry of Ireland (chemistryireland.org) or copy & paste to browser:
https://www.chemistryireland.org

ABOUT

Registration is free for the **All-Ireland Chemical Expo**, the premier gathering for professionals in the chemical industry. Join us for an immersive and engaging event dedicated to exploring the latest advancements, trends, and challenges in chemical processing.

Engage with leading experts, researchers, and industry pioneers as they share their insights through captivating keynote presentations, interactive workshops, and engaging panel discussions. Discover innovative technologies and strategies that drive efficiency, sustainability, and safety in chemical processes.

Network with peers, exchange ideas, and forge valuable connections that can shape the future of chemical processing. Don't miss this unparalleled opportunity to stay ahead of the curve in Ireland's thriving chemical sector.

For speaking opportunities contact **casey@prempubevents.com**

For sponsoring or exhibiting opportunities contact **mark@prempubevents.com**

More Details and Free Registration here:
All Ireland Chemical Expo (chemicalevent.com)

Call Open: Irish Research Council Researcher of the Year Awards 2023

The Irish Research Council (IRC) has opened its call for nominations for the 2023 Irish Research Council **Researcher of the Year Awards**. Now in their seventh year, these awards will commend the very best of our awardees and alumni who are making highly significant and valuable contributions to knowledge, society, culture, and innovation.
The awards also celebrate mentors, supervisors, research officers, and technical support staff from across the Irish higher education and research system (whether funded by the IRC or not). The Research Ally Prizes honour their role in supporting and sustaining the research ecosystem and fostering a positive academic culture based on equality, inclusivity, and respect.

Nominations are invited under four categories:

1. Researcher of the Year
2. Early Career Researcher of the Year
3. Impact Award
4. Research Ally

Detailed information on the criteria for awards and nomination process can be found in our Guidance Document on the Irish Research Council Researcher of the Year **call page**.

Key Dates	
Deadline	Date
Call Open	14 July 2023
Final FAQ Submissions	22 September 2023
Nomination Deadline	29 September 2023
Call Announcement	December 2023

Irish Research Council Strategic Plan 2020-2024

Our vision

Our vision is for a connected, agile Irish Research Council that invests in the people, skills and ideas, across all disciplines, that will deliver new possibilities for the future, within Ireland and beyond.

Our mandate

The IRC is an associate agency of the Department of Further and Higher Education, Research, Innovation and Science, under the aegis of the Higher Education Authority (HEA), and has the following mandate:

- To fund excellent research within, and between, all disciplines, and in doing so to enhance Ireland's international reputation as a centre for research and learning
- To support the education and skills development of excellent individual early-stage researchers and to cultivate agile independent researchers and thinkers, while offering a range of opportunities which support diverse career paths
- To enrich the pool of knowledge and expertise available for addressing Ireland's current and future needs, whether societal, cultural or economic, and to deliver for citizens through collaboration and enabling knowledge exchange with Government departments and agencies, enterprise and civic society
- To provide policy advice on postgraduate education, and on more general research matters, to the HEA and other national and international bodies. In giving us this role, Government requested that particular attention be given to the Arts, Humanities and Social Sciences.

The mandate and unique role of the IRC generates a strong value-added dimension in the Irish research and innovation landscape.

The *IRC Strategic Plan 2020–2024* will underpin the continued delivery of our mandate within the Irish higher education and research system. This plan seeks to consolidate the unique role of the IRC in supporting all disciplines within the Irish research funding landscape and the suite of programmes that underpin this role. Furthermore, the plan articulates how the IRC will maximise its contribution to national progress and ambitions over the coming years.

Our values

In delivering on its mandate, the Irish Research Council's core value is research excellence: across all disciplines, determined on the basis of independent peer review, in an open, objective, transparent and trusted manner. In addition, we uphold the following values:

- Independence
- Leadership
- Researcher-centredness
- Partnership
- Professionalism

How we operate

We operate within the policy framework of the Department of Further and Higher Education, Research, Innovation and Science and the Higher Education Authority, but are independent in our funding decisions. To best deliver for citizens, we partner nationally and internationally with the research community, government departments and agencies, enterprise and civic society. We engage with the Irish research community regularly to inform our work and the future development of our activities. We ensure high standards in our practices and policies through periodic review and evaluation.

The Council is an associated agency of the Department of Further and Higher Education, Research, Innovation and Science and operates under the aegis of the Higher Education Authority. It was

established in mid-2012 following the merger of the Irish Research Council for Humanities and Social Sciences (IRCHSS) and the Irish Research Council for Science, Engineering and Technology (IRCSET).

Ukrainian Researchers Scheme

4 July

In June 2022, the IRC launched the Ukrainian Researchers Scheme to facilitate Ukrainian researchers supported by the Government under the Temporary Protection Directive (TPD) to join research projects of IRC-funded principal investigators aligned to their individual research interests. Four awards were made under the Scheme in 2022.
A second round of the Scheme is opening on 4 July 2023. The IRC has a limited amount of funding to make awards under this Scheme, and the Scheme will remain open until such time as the funding is exhausted. Eligible applications will be funded on a first come first served basis, aiming in so far as is possible to ensure a distribution of awards across institutions and regions. Further details can be found in the 2023 Call Document.

Background

Following the outbreak of war in Ukraine and the resulting refugee crisis, Ireland's research funders have been engaging collaboratively on developments, in particular relating to how researchers from Ukraine who are arriving in Ireland due to the war can be supported by the Irish research system.
The Irish Research Council has made a provision to assist Ukrainian researchers supported by the government under the **Temporary Protection Directive** (TPD). Irish Research Council-funded principal investigators (PIs) on current or forthcoming PI-level awards will be able to apply to the IRC for funding to add an eligible individual to the project where the individual's research interests are aligned with those of the project. Eligible IRC-funded PIs can apply to add displaced researchers and research-related technical staff across the research career framework, including postdoctoral fellows and more experienced investigators, to their awards.
This scheme will adopt an EOI process, a shortened application form and an expedited review process. It seeks to build on and complement other systems and supports introduced by Irish Government departments and agencies.

What we offer

Awards can have a maximum duration of 12 months. The budget requested and the award duration must reflect the scale and nature of the proposed research. Activities funded should relate, and add value to, the original award objectives. Funding must be associated with clearly identified individuals and activities. Eligible costs include:

- Salaries
- Materials and consumables up to a total of €2,000 per researcher
- A contribution of €1,000 towards the purchase of a computer
- Overheads at 25% of total direct costs (excludes student fees and equipment costs)

How to apply

Please see the 2023 Call Document for further information about how to apply to this Scheme. All applications must be submitted by the research office of the host institution via email to **ukrainianresearchers@research.ie**.

Key dates

The call will open on 4 July 2023.
Research offices must notify the IRC of the intention to develop an application before it is progressed by submitting an Expression of Interest (EOI) form to ukrainianresearchers@research.ie.
It is important to note that applications will only be accepted in instances where a completed EOI form has been received and approved by the IRC.
Once an EOI form has been approved by the IRC, each applicant will have a subsequent 28 days to submit their application form upon receipt of notification from the IRC.
If you do not find the answer to your query in the call documentation, you should contact the research office in your proposed institution which will provide information and clarification on the call.

Research offices can send any queries they are unable to clarify to **ukrainianresearchers@research.ie**.

Dr Rebecca Power attends the 72nd Lindau Laureate Meeting

28 August

The influential Lindau Nobel Laureate Meetings date back to 1951 and provide an important opportunity for young and early career researchers to join Nobel Laureates from their fields in workshops, lectures and cross-generational exchanges of ideas, these meetings take place in the idyllic setting of Lindau in Germany on the shores of Lake Constantine. Dr Power, a postdoctoral researcher at the **Nutrition Research Centre Ireland (NRCI)** in South Eastern Technical University (SETU) was selected through a panel process to attend the 72nd Lindau Laureate Meeting representing Ireland. This Irish Research Council is a strategic funding partner with the Lindau Nobel Laureate Meeting. Dr Power shares below her experience of attending the prestigious Nobel Laureate Meetings which took place from 25th – 30th June 2023.

Dr Rebecca Power

Being among the select group of approximately 600 young scientists from around the world, while also proudly representing my country, stood as a powerful validation of my academic accomplishments to date. This in turn has fostered a heightened sense of confidence in my own capabilities.

Read the full interview here:

Dr Rebecca Power attends the 72nd Lindau Laureate Meeting | #LoveIrishResearch | Irish Research Council

The Institute of Chemistry of Ireland

Irish Young Chemists' Network (IYCN)

After the ICI Postgraduate Chemistry Research Symposium held online in September 2020 was a success, an idea was put forward to establish an Irish Young Chemists' Network (IYCN) as part of the Institute of Chemistry of Ireland (ICI). This initiative was highly welcomed and encouraged by both the postgraduates in attendance of the online symposium and approved by the ICI Council Members during their Council meeting on the 1st October 2020.

The committee of the online research symposium was made up of postgraduate students from various institutions in Ireland. As this committee worked in great harmony together, and had already established connections while organising the symposium, it was suggested to keep this committee for the IYCN. The members were all happy and motivated to be part of the IYCN committee. Together, we have summarised some of the benefits of establishing the Irish Young Chemists' Network to include:

1) **Community, network and connection of young chemists**
2) **More opportunities for collaboration between early stage researchers**
3) **Organisation of conferences and events for young chemists**
4) **Opportunity for postgraduate students to present and discuss their work**
5) **A platform to promote upcoming positions suited for young chemists**

The committee feel strongly about the first benefit especially during these times. We feel that the mental health of young chemists, including postgraduate students, is critical and essential. A sense of community and closeness, particularly during moments like these, would surely be beneficial to their mental health. As the chair of the committee, I will work together with the wonderful team of postgraduate students to establish the IYCN, while liaising and updating the ICI Council periodically as well as continue to avail of their expertise and support.

Mark Kelada, B.Sc. MICI Ph.D.

ICI Young Chemist Representative and Chair of Irish Young Chemists' Network

Are you a chemist in Ireland aged between 18-35 years old? Want to be part of an exciting new network of young chemists and be part of a growing community? Join us today by emailing youngchemists@instituteofchemistry.org with your name, age, and where you study or work. If your institution is not listed below, you could even be part of our incredible committee.

ICI's Young Chemists Network Committee for 2023/2024

The ICI Young Chemists Network is dedicated to facilitating networking opportunities and fostering connections among chemists in Ireland. We provide a platform for knowledge sharing, professional development, and career enhancement. Given the fundamental changes of Irish culture in recent decades, this year's committee is dedicating it is efforts towards equality, diversity and inclusion within the field of chemistry.

ICI YCN Committee at the 74th Irish Universities Chemistry Research Colloquium at NUIG June 2023

"We are fortunate to have a committee of self-motivated and diligent individuals, committed to the same mission. Ireland has changed as a society over recent decades. It is diverse and full of people with unique and wonderful cultures. As a professional body for chemistry within Ireland we want to ensure this diversity is reflected within Irish chemistry. It is our responsibility to change. We would be delighted to work with stakeholders, who would like to boost representation of those underrepresented within Irish chemistry".

***Seán Byrne**, Chairperson of the ICI YCN, Director of the Institute of Chemistry Ireland, PhD student UCD.*

Email: sean.byrne6@ucdconect.ie , youngchemists@instituteofchemistryireland.org

Committee Members 2023/24

Seán Byrne
Chair
UCD

Cathal Kelly
Vice-Chair
QUB

Wiktoria Brytan
Secretary
UL

Hong Ann Gan
Treasurer
TUS

Neil Curtis
UCC

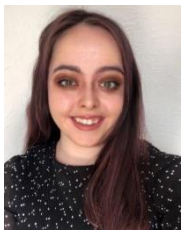
Róisín Byrne
DCU

Aaron McCormack
NUIG

Hanka Besic
NUIG

Kwadwo Asare Owusu
UL

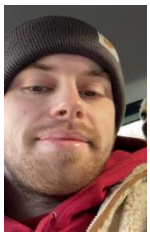
Keela Kessie
MU



Mary Flood
UCD/ Trinity

Francesca Adami
UCD

Alumenda Moreno Borralo
Trinity



Keane McNamee
MU

Sean Byrne is the new Chair of ICI's Young Chemists Committee.

Last but not least, a big thanks to the outgoing Committee and Chair Colm McKeever at Maynooth University for their efforts in running events and building up the Young Chemists Network here in Ireland.

Institute of Chemistry of Ireland as a Co-Owner Benefits when you publish in PCCP

Physical Chemistry Chemical Physics
21 June 2023, Issue 23
Phys. Chem. Chem. Phys., 2023,25,
15569-15569
https://doi.org/10.1039/D3CP90123H

https://pubs.rsc.org/en/journals/journalissues/cp#!recentarticles&adv

Support our Institute by publishing your new research results in this prestigious peer reviewed journal.

Scope

PCCP (*Physical Chemistry Chemical Physics*) is an international journal for the publication of cutting-edge original work in physical chemistry, chemical physics and biophysical chemistry. To be suitable for publication in *PCCP*, articles must include significant new physical insights; this is the prime criterion that referees and the Editors will judge against when evaluating submissions.

The journal has a broad scope which includes spectroscopy, dynamics, kinetics, statistical mechanics, thermodynamics, electrochemistry, catalysis, surface science, quantum mechanics and theoretical developments play an important part in the journal. Interdisciplinary research areas such as polymers and soft matter, materials, nanoscience, surfaces/interfaces, and biophysical chemistry are especially welcomed whenever they include a physico-chemical approach.

PCCP is proud to be a Society journal and is co-owned by 19 national chemical societies. The journal is published by the Royal Society of Chemistry on a not-for-profit basis for the benefit of the whole scientific community.

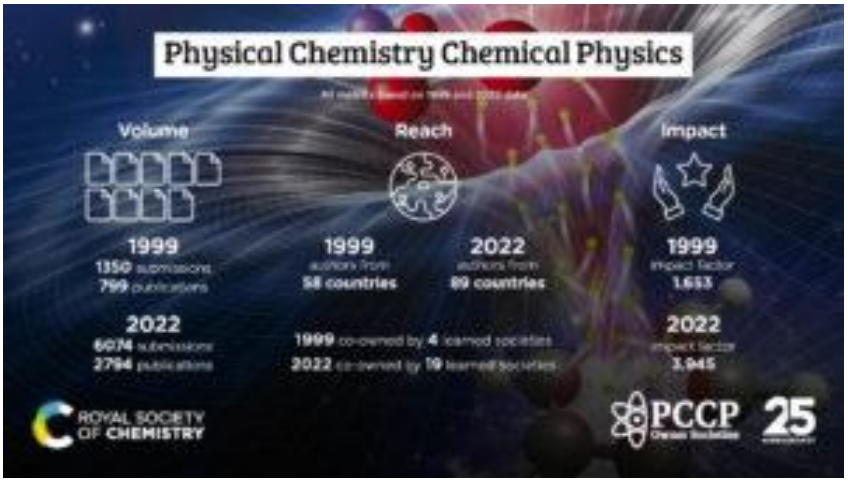
Impact factor: 4.493*
Publishing frequency: 48 per year
Indexed in MEDLINE and Web of Science

This year, PCCP is celebrating the 25th volume of PCCP. A lot has changed since our first issue – PCCP was launched by four international chemistry and physical chemistry societies, but over the years, another 15 learned societies including ICI joined this journal. In 2023, our community is now represented by an internationally renowned editorial board, comprising of 14 associate editors carefully selected by our 19 Owner Societies. With their support, we have published 45,000 articles from over 120 countries to date.

PCCP is a Transformative Journal and Plan S compliant

- Impact factor: 3.3*
- Eigenfactor Score: 0.08661*
- Time to first decision (all decisions): 31.0 days**
- Time to first decision (peer reviewed only): 40.0 days***
- CiteScore: 5.9****
- Indexed in MEDLINE and Web of Science
- Chair: Anouk Rijs
  Deputy Chair: Henry Schaefer
- Article submissions (2022): 5766
- Article publications (2022): 2769
- Open access publishing options available

A quick look at the difference from 1999 to 2023: Celebrating 25 years of PCCP – PCCP Blog (rsc.org)



Chemistry and related Sciences around the World

Verification of preparations of (1H-indol-3-yl)methyl electrophiles and development of their microflow rapid generation and substitution | Communications Chemistry

4 March
Verification of preparations of (1H-indol-3-yl)methyl electrophiles and development of their microflow rapid generation and substitution | Communications Chemistry (nature.com)
DOI: https://doi.org/10.1038/s42004-023-00837-1

Benzene's forgotten isomer takes centre stage in organic synthesis | Research | Chemistry World

2 May
https://www.chemistryworld.com/news/benzenes-forgotten-isomer-takes-centre-stage-in-organic-synthesis/4017364.article
DOI: 10.1038/s41586-023-06075-8

How chemists could give new life to old wind turbine blades | MIT Technology Review

2 May
How chemists could give new life to old wind turbine blades | MIT Technology Review

Researchers create salts for cheap and efficient CO2 capture

3 May
Researchers create salts for cheap and efficient CO2 capture (phys.org)
DOI: https://dx.doi.org/10.1016/j.xcrp.2023.101383

Synergistic binding sites in a metal-organic framework for the optical sensing of nitrogen dioxide | Nature Communications

2 May
Synergistic binding sites in a metal-organic framework for the optical sensing of nitrogen dioxide | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38170-9

Sequential Modifications of Metal–Organic Layer Nodes for Highly Efficient Photocatalyzed Hydrogen Atom Transfer | Journal of the American Chemical Society

1 May
Sequential Modifications of Metal–Organic Layer Nodes for Highly Efficient Photocatalyzed Hydrogen Atom Transfer | Journal of the American Chemical Society (acs.org)

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Helicity-modulated remote C-H functionalization | Science Advances

28 April
Helicity-modulated remote C-H functionalization | Science Advances
DOI: https://doi.org/10.1126/sciadv.adg6680

A high-throughput platform for efficient exploration of functional polypeptide chemical space | Nature Synthesis

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A high-throughput platform for efficient exploration of functional polypeptide chemical space | Nature Synthesis
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Electrosynthesis of chlorine from seawater-like solution through single-atom catalysts | Nature Communications

29 April
Electrosynthesis of chlorine from seawater-like solution through single-atom catalysts | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38129-w

The electron–proton bottleneck of photosynthetic oxygen evolution | Nature

3 May
The electron–proton bottleneck of photosynthetic oxygen evolution | Nature
DOI: https://doi.org/10.1038/s41586-023-06008-5

Studying fundamentals of water as a solvent could lead to greener cellulose-based products

3 May
Studying fundamentals of water as a solvent could lead to greener cellulose-based products (phys.org)
DOI: https://dx.doi.org/10.1016/j.matt.2023.03.021

Norbrook: Newry pharmaceutical firm to cut 180 jobs - BBC News

3 May
Norbrook: Newry pharmaceutical firm to cut 180 jobs - BBC News

Control of dynamic sp3-C stereochemistry | Nature Chemistry

13 March
Control of dynamic sp3-C stereochemistry | Nature Chemistry
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Electrochemical synthesis of propylene from carbon dioxide on copper nanocrystals | Nature Chemistry

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Electrochemical synthesis of propylene from carbon dioxide on copper nanocrystals | Nature Chemistry
DOI: https://doi.org/10.1038/s41557-023-01163-8

New catalyst transforms carbon dioxide into sustainable byproduct

3 May
New catalyst transforms carbon dioxide into sustainable byproduct (phys.org)
DOI: https://dx.doi.org/10.1038/s41586-023-05918-8

A semiconductor-electrocatalyst nano interface constructed for successive photoelectrochemical water oxidation | Nature Communications

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C(alkyl)–C(vinyl) bond cleavage enabled by Retro-Pallada-Diels-Alder reaction | Nature Communications

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C(alkyl)–C(vinyl) bond cleavage enabled by Retro-Pallada-Diels-Alder reaction | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38067-7

Photocatalytic CO2 reduction using La-Ni bimetallic sites within a covalent organic framework | Nature Communications

29 April
Photocatalytic CO2 reduction using La-Ni bimetallic sites within a covalent organic framework | Nature Communications
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Direct nucleophilic and electrophilic activation of alcohols using a unified boron-based organocatalyst scaffold | Nature Communications

4 May
Direct nucleophilic and electrophilic activation of alcohols using a unified boron-based organocatalyst scaffold | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38228-8

Researchers Discover Hidden Chemical Order in Disordered Compound

1 May
Researchers Discover Hidden Chemical Order in Disordered Compound (scitechdaily.com)
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Dundalk to become national centre for STEM in Ireland | Newstalk

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Dundalk to become national centre for STEM in Ireland | Newstalk

Synthesis of polyacene by using a metal–organic framework | Nature Synthesis

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Low-paid PhD researchers should get €25,000 a year, says Government report – The Irish Times

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Low-paid PhD researchers should get €25,000 a year, says Government report – The Irish Times

Compact multi-foci metalens spectrometer | Light: Science & Applications

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Compact multi-foci metalens spectrometer | Light: Science & Applications (nature.com)
DOI: https://doi.org/10.1038/s41377-023-01148-9

APC and UCC sweep all Top 7 positions in Irish microbiologist rankings

8 May
APC News | University College Cork (ucc.ie)

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2 May

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Scientists streamline a widely used chemical reaction, creating new manufacturing opportunities

9 May
Scientists streamline a widely used chemical reaction, creating new manufacturing opportunities (phys.org)
DOI: https://dx.doi.org/10.1038/s44160-023-00275-w

4,6-Diamino-2-thiopyrimidine-based Cobalt Metal Organic Framework (Co-DAT-MOF): green, efficient, novel and reusable nanocatalyst for synthesis of multicomponent reactions | Scientific Reports

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Honeywell announces tech to turn hydrogen and CO2 into lower-carbon aviation fuel | Reuters

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Honeywell announces tech to turn hydrogen and CO2 into lower-carbon aviation fuel | Reuters

Chiral perturbation on single benzene-based fluorophores: A structure/(chir)optical activity relationship study - Coehlo - Chirality - Wiley Online Library

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Chiral perturbation on single benzene-based fluorophores: A structure/(chir)optical activity relationship study - Coehlo - Chirality - Wiley Online Library
DOI: https://doi.org/10.1002/chir.23577

Chemical Industry Leaders Reinvent Business Model for Post-Pandemic World

9 May
https://www.forbes.com/sites/sap/2023/05/09/chemical-industry-leaders-reinvent-business-model-for-post-pandemic-world

Switching imidazole reactivity by dynamic control of tautomer state in an allosteric foldamer | Nature Communications

8 May
Switching imidazole reactivity by dynamic control of tautomer state in an allosteric foldamer | Nature Communications

Switching imidazole reactivity by dynamic control of tautomer state in an allosteric foldamer

8 May
Switching imidazole reactivity by dynamic control of tautomer state in an allosteric foldamer | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38339-2

Recovery of homogeneous photocatalysts by covalent organic framework membranes | Nature Communications

11 May
Recovery of homogeneous photocatalysts by covalent organic framework membranes | Nature Communications
DOI: https://doi.org/10.1038/s41467-023-38424-6

Catalyst cleans up CO2 better with different preparation
11 May
Catalyst cleans up CO2 better with different preparation (phys.org)
DOI: 10.1126/science.adf6984

Scientists Discover a New Class of “Molecular Motors”
12 May
Scientists Discover a New Class of “Molecular Motors” (scitechdaily.com)
DOI: 10.1038/s41567-023-02009-3

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4 May
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Upscaled production of an ultramicroporous anion-exchange membrane enables long-term operation in electrochemical energy devices | Nature Communications
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Upscaled production of an ultramicroporous anion-exchange membrane enables long-term operation in electrochemical energy devices | Nature Communications
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Mapping nanocrystalline disorder within an amorphous metal–organic framework | Communications Chemistry
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Direct synthesis of oxalic acid via oxidative CO coupling mediated by a dinuclear hydroxycarbonylcobalt(III) complex | Nature Communications
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Direct synthesis of oxalic acid via oxidative CO coupling mediated by a dinuclear hydroxycarbonylcobalt(III) complex | Nature Communications
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Simulation provides images from the carbon nucleus
15 May
Simulation provides images from the carbon nucleus (phys.org)
DOI: 10.1038/s41467-023-38391-y

Porous crystals made from plant extracts purify water from pharmaceutical pollutants
15 May
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Researchers develop solution-processible single-crystal porous organic polymer
15 May
Researchers develop solution-processible single-crystal porous organic polymer (phys.org)
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Researchers demonstrate electrical creation and control of antiferromagnetic vortices
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Researchers demonstrate electrical creation and control of antiferromagnetic vortices (phys.org)
DOI: 10.1038/s41565-023-01386-3

How to attract the next generation of chemists | Nature Reviews Chemistry
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How to attract the next generation of chemists | Nature Reviews Chemistry
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Coupling Single-Ni-Atom with Ni–Co Alloy Nanoparticle for Synergistically Enhanced Oxygen Reduction Reaction | Inorganic Chemistry
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Coupling Single-Ni-Atom with Ni–Co Alloy Nanoparticle for Synergistically Enhanced Oxygen Reduction Reaction | Inorganic Chemistry (acs.org)
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Stanford researchers find new way to produce ammonia that does not emit CO2
18 May
Stanford researchers find new way to produce ammonia that does not emit CO2 (stanforddaily.com)

The future of chemistry is language | Nature Reviews Chemistry (Subscription)
19 May
The future of chemistry is language | Nature Reviews Chemistry
DOI: https://doi.org/10.1038/s41570-023-00502-0

Photochromism from wavelength-selective colloidal phase segregation | Nature
17 March
Photochromism from wavelength-selective colloidal phase segregation | Nature
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Inside the academic publishing grift - The Spectator World (Subscription)
16 May
Inside the academic publishing grift - The Spectator World

'Electrifying' achievement for making more sustainable polymers
19 May

'Electrifying' achievement for making more sustainable polymers (phys.org)
DOI: 10.1021/jacs.3c03239

Novel tin-based metal–organic frameworks for reducing carbon dioxide to formate

19 May
Novel tin-based metal–organic frameworks for reducing carbon dioxide to formate (phys.org)
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Acidic CO2-to-HCOOH electrolysis with industrial-level current on phase engineered tin sulfide | Nature Communications

18 May
Acidic CO2-to-HCOOH electrolysis with industrial-level current on phase engineered tin sulfide | Nature Communications
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Fatty acids might exist in space

19 May
Fatty acids might exist in space (phys.org)
DOI: 10.48550/arxiv.2305.04762

Researchers develop new method to synthesize cannabis plant compound

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Researchers develop new method to synthesize cannabis plant compound (phys.org)
DOI: 10.1002/ange.202302475

The Periodic Table of Orbitals

? May
The Periodic Table of Orbitals (liam-ilan.github.io)

Oxygen functionalization-assisted anionic exchange toward unique construction of flower-like transition metal chalcogenide embedded carbon fabric for ultra-long life flexible energy storage and conversion

19 May
Oxygen functionalization-assisted anionic exchange toward unique construction of flower-like transition metal chalcogenide embedded carbon fabric for ultra-long life flexible energy storage and conversion - Bhattarai - Carbon Energy - Wiley Online Library
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Scientists Structurally Analyze Highly Reactive Anionic Pt(0) Complexes for the First Time

21 May
Scientists Structurally Analyze Highly Reactive Anionic Pt(0) Complexes for the First Time (scitechdaily.com)
DOI: 10.1002/anie.202301509

Nanotechnology Getting a Boost from RTP Startup NuRevelation's Molecular Cocktails | STATNANO

22 May
Nanotechnology Getting a Boost from RTP Startup NuRevelation's Molecular Cocktails | STATNANO

Self-healable and crack-resistant hydrogel microfibers inspired by spider silk

19 May
Self-healable and crack-resistant hydrogel microfibers inspired by spider silk (techxplore.com)
DOI: 10.1038/s41467-023-37036-4

Do scientific meetings matter? Turning up for talks brings surprise benefits

22 May

Do scientific meetings matter? Turning up for talks brings surprise benefits (nature.com)

DOI: https://doi.org/10.1038/d41586-023-01604-x

China overtakes United States on contribution to research in Nature Index

19 May

China overtakes United States on contribution to research in Nature Index

DOI: https://doi.org/10.1038/d41586-023-01705-7

Advances in Nanoelectrochemistry: Enabling New Discoveries in Small Volume Chemistry

22 May

Advances in Nanoelectrochemistry: Enabling New Discoveries in Small Volume Chemistry (azonano.com)

A step-for-step main-group replica of the Fischer carbene synthesis at a borylene carbonyl | Nature Communications

13 May

A step-for-step main-group replica of the Fischer carbene synthesis at a borylene carbonyl | Nature Communications

DOI https://doi.org/10.1038/s41467-023-36251-3

Five-year plan to make South East Technological University a leading global tech institution

22 May

Five-year plan to make South East Technological University a leading global tech institution (irishexaminer.com)

How mixing academia and industry opens doors in graduate school and beyond

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New glass could cut carbon footprint by nearly half and is 10x more damage resistant

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Gold buckyballs, oft-used nanoparticle 'seeds' found to be one and the same

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EuChemS Magazine

Editorial: by the President Floris Rutjes

Herewith, I proudly present the first issue of EuChemS Magazine.

March 14, 2023

Last year, it was already announced that EuChemS will restyle its newsletters, meaning that the Brussels News Updates (BNU) and Chemistry in Europe would cease to exist at the beginning of this year. At the same time, a new newsletter called *EuChemS Magazine*, has been launched. It will appear 12 times per year, with most of the issues limited in size, reflecting the contents of BNU, while three of them will be somewhat more extensive, containing the types of contributions that were typically published in Chemistry in Europe. To distinguish between them, the extended ones will be named *EuChemS Magazine*$^{+}$.

The *EuChemS Magazine* represents a substantial improvement in EuChemS communication in several ways. First of all, this is a newsletter that everyone will directly associate with EuChemS through its name and thus contribute to our visibility. Furthermore, the cover of the newsletter and the lay-out of the pages are in the EuChemS 'house style', which makes it more recognizable for those familiar with EuChemS. Finally, in terms of processing of the content also some changes were made. New software is used, which makes it easier to create a professional appearance and allows the publication of new articles at any time rather than only at the launch of a new issue. This makes that the published content is typically up-to-date.

Designing and implementing such a new format, working with new software, double checking that everything works well, merging address lists, and probably many other things, requires an enormous effort and I am very grateful to the dedicated EuChemS Office staff Claudia, Marton and Nineta for all the work they put into this. The process was not always easy, but the transition went smoothly and the reward is an attractive newsletter that serves EuChemS better than the previous ones.

Aren't you subscribing yet? Then go to https://www.magazine.euchems.eu/ and sign up. I also realize that a new newsletter is not immediately perfect. Do you have any comments, or do you see things that could be improved? Are there aspects that you like or do not like about *EuChemS Magazine*? We are eager to receive your feedback and very willing to implement suggestions for improvement. Please send your comments to president@euchems.eu.

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Editorial: by Sabine L. Flitsch, MIB & School of Chemistry of the University of Manchester

July 14, 2023

Presenting awards to outstanding scientists are some of the most visible activities of grass-root organisations such as the chemical societies of Europe and their umbrella, EuChemS. Awards have many benefits to the societies beyond promoting individual careers – they can help building communities, motivate and inspire by setting examples for young scientists and help highlighting and communicating important achievements in specific scientific fields to a much broader audience.

Lecture Award. This award has a long history of illustrious winners dating back to the first in 1980 to Professor Derek Barton, to our recent lecturers Professor Silvia Osuna (2021) for her computational work, Professor Victor Mougel (2020) for his contributions to sustainable chemistry, Professor David Portehault (2019) for his work on nanomaterials and Professor Raffaella Buonsanti (2018) for her research into catalysis.

Serving on awards panels is a very positive experience because we learn about so many really exciting scientific discoveries well beyond our own field. However, choosing the right candidate can be very challenging, especially from such a large and strong scientific community as we are fortunate to have in Europe. We rely heavily on you, the community, to bring to forward the best candidates from as wide and diverse fields and backgrounds as possible.

I would encourage all of you to help find outstanding candidates within your institution or research fields to be considered for EuChemS awards and other prizes. Nominations do not need to be from senior scientists, but they need to address the criteria of the award, so it is important to consider these carefully. Successful nominations need to state very clearly what the important scientific achievements of the candidates are, with sufficient detail in support but also understandable to the non-expert. Nominees will need to provide their CV which should highlight and explain the candidate's important scientific discoveries with full references to published work, with the overall CV putting the work into context. It should be emphasised that there are no rules as to the quantity of outputs or metrics – one major scientific publication describing an important and original advance in the field can be just as convincing as a body of several contributions.

For a thriving scientific community to be successful, we need to celebrate diversity in every respect, and scientific awards should reflect this ambition. Very often, we see scientists who are lucky to have strong mentorship to be put forward, and the same scientists are repeatedly nominated. It is so important to look out for achievement that has not been recognised before and I would encourage you all to consider nominating today – scientific awards matter to winners and also matters to all of us.

Athina Anastasaki receives EuChemS Lecture Award

The EuChemS Lecture Award is given every year to one junior scientist working in chemistry in a country with a EuChemS Member Organisation. The award recognises major achievements of scientists generally within 10 years of completing their PhD.

Recipient of the 2022 award Athina Anastasaki is an Assistant Professor at ETH Zürich, leading the Laboratory of Polymeric Materials. Her team's main research area is fundamental polymer synthesis, self-assembly and chemical recycling predominantly in the area of controlled radical polymerization. As a co-author of numerous publications, Associate Editor in the RSC Journal Polymer Chemistry, and a recipient of an ERC Grant and a wide range of awards – such as the Hanwha-Total IUPAC Young Scientist Award, the Polymers Young Investigator Award, as well as Golden Owl Award in recognition to outstanding faculty teaching, amongst others – she possesses an outstanding research profile, which is now recognised by the Lecture Award.

More information on the EuChemS Lecture Award, as well as about the previous awardees can be found here.

Athina Anastasaki will formally receive the award and give a lecture to an international audience of high-profile chemists at the 9th EuChemS Chemistry Congress (ECC9). ECC9 is organised by the Institute of Chemistry Ireland. It will be held in Dublin, Ireland, in 2024.

Antwerp to host ECC10

The 10th EuChemS Chemistry Congress in 2026 will take place in Antwerp, Belgium. The event will be organised by the Royal Flemish Chemical Society (KVCV), following the 2024 ECC9, to be held in Dublin next year.

Marton Kottmayer, EuChemS

August 15, 2023

The EuChemS Chemistry Congress (ECC) is a major, biannual chemistry conference, where Chemists from all parts of Europe and beyond come together to present and discuss the latest achievements in cutting edge chemical sciences. The EuChemS Executive Board has chosen the offer of the KVCV for the organisation of the 10th edition of this prestigious event in the Flemish city of Antwerp.

Antwerp houses a significant chemical cluster of Europe, extending over the borders into the Netherlands, and Nordrhein-Westfalen in Germany. The chemical companies in these three regions are strongly interconnected and offer innovative solutions for the global challenges of today and tomorrow. Moreover, the area also hosts an important pharma and life sciences industry. These

organisations provide opportunities for the thousands of chemists who graduated from renowned universities in the region.

Before the 2026 ECC10, the upcoming 9th congress, ECC9 will be held in Dublin, Ireland in 2024, and is being organised by the Institute of Chemistry of Ireland (ICI).

EuChemS Historical Landmarks in Altafulla, Mülheim and Milan

15 August

Marton Kottmayer, EuChemS

The 2022 EuChemS Historical Landmarks Award was received by the "Hospital of Pilgrims" on the regional level, and by the legacy of Karl Ziegler and Giulio Natta on the European Level.

The Hospital of Pilgrims is a Renaissance style building, located in Altafulla, a town near Tarragona, on the southern coast of Catalonia, Spain. The “Zeigler-Natta legacy” encompasses two places: the historical laboratory of the Max-Planck-Institut (MPI) für Kohlenforschung in Mülheim, Germany and the “Giulio Natta” Department of Chemistry, Materials and Chemical Engineering at the Politecnico in Milano, Italy. These locations are now proudly signified on the interactive map of the European Chemistry Landmarks.

As always, these locations have vast histories behind them, as the EuChemS Historical Landmark Awards are given to locations of significance, to recognise the role of science and chemistry in the history and heritage of the continent. The Hospital of Pilgrims exemplifies this by hosting the laboratory of chemist and naturalist Antoni de Martí i Franquès in the 18th century. In this laboratory, significant strides were made in atmospheric chemistry research. Martí’s eudiometrical tests established the composition of the air, and left a significant scientific aftermath, as they were used for many years to come.

The Legacy of Karl Ziegler and Giulio Natta leads us to the more recent past, however, the historical significance of the duo’s interconnected research on the field of synthetic polymers cannot be understated. Their cooperative and competitive research and development activities – which Zeigler done in Max-Planck-Institut (MPI) in Mülheim, while Natta in Politecnico di Milano – resulted in discovering a way to catalyse the production of polyethylene much simpler than before. Their discovery was made in 1953, for which they received a joint noble prize in 1963 – and this year, 60 years later, their respective places of work will jointly receive the EuChemS Historical Landmark Awards to commemorate their discoveries made there.

You can learn more about the EuChemS Historical Landmarks, and see the recipients of the awards of the last years here.

EuChemS Chemistry Congress
28 August to 1 September
2022 · LISBON.PT

Videos of Masterclass on Chemistry in Arts

Provided by: Sci-Meet :: your event is our science

For those who were unable to attend the Masterclass on Chemistry in Arts please find enclosed the links for videos.

EGYPTIAN BLUE MEET RAFFAELLO

with Antonio Sgamellotti and Aldo Winkler, Accademia Nazionale dei Lincei, Università degli Studi di Perugia. Istituto Nazionale di Geofisica e Vulcanologia

https://www.dropbox.com/sh/1k3l3rileo6twzw/AADpiZHepsQ4MbKqP4irdOeka?dl=0&preview=1+Egyptian+blue+meet+Raffaello.mp4

Celebrating the International Year of Glass

PAINTING ON GLASS: FROM RECIPES TO MAGIC LANTERNS

with Marcia Vilarigues

VICARTE - Glass and Ceramic for the Arts

https://www.dropbox.com/sh/1k3l3rileo6twzw/AADpiZHepsQ4MbKqP4irdOeka?dl=0&preview=2+Painting+on+glass.mp4

Arraiolos carpets through the eyes of science.

with Cristina Barrocas Dias and Ana Manhita

HERCULES Laboratory | University of Évora

https://www.dropbox.com/sh/1k3l3rileo6twzw/AADpiZHepsQ4MbKqP4irdOeka?dl=0&preview=3+Arraiolos+carpets+eyes+of+science.mp4

MYSTERY AND SECRETS OF THE AJUDA SONGBOOK

with Graça Videira Lopes, Paula Nabais and Márcia Vieira

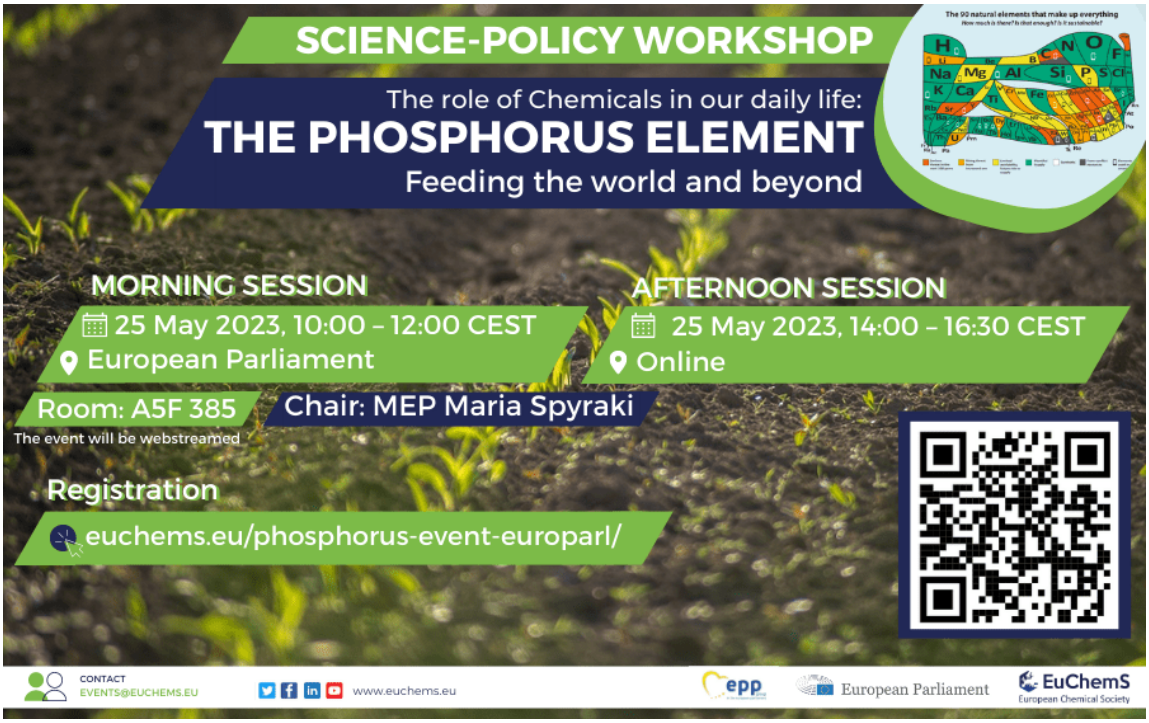
Instituto de Estudos Medievais NOVA FCSH. LAQV-REQUIMTE, NOVA School of science and technology

https://www.dropbox.com/sh/1k3l3rileo6twzw/AADpiZHepsQ4MbKqP4irdOeka?dl=0&preview=4+Secrets+of+Ajuda+Songbook.mp4

Sent by EuChemS 2022

##########

The role of Chemicals in our daily life: The Phosphorus element – feeding the world and beyond



On 25 May, the most recent event in the EuChemS Periodic Table workshop series. The role of Chemicals in our daily life: The Phosphorus element – feeding the world and beyond was held.

The morning session of the workshop took place in the European Parliament, in Brussels. It was Co-Chaired by prominent MEP Maria Spyraki and scientific-chair Evamarie Hey-Hawkins. Christos Vasilakos, senior policy adviser for MEP Spyraki was also present. After welcome and introductions from Mr Vasilakos, EuChemS President Floris Rutjes and Evamarie Hey-Hawkins, presentations from Nicola Armaroli, Alessandra Quadreli, and European Sustainable Phosphorus Platform president Robert van Spingelen were shown, followed by an engaging panel discussion. This session also gave an opportunity to participants to learn about the European Parliament's science-policy priorities from MEP Spyraki.

The afternoon session was held on EuChemS Premises, where, after light lunch, additional speakers from all around the word, as well as the panellists from the morning session carried on with exciting conversation about this crucial element. Afternoon's presentations were held by Dana Cordell, Chris Lawson, Chris Slootweg and Jan J. Weigand. The event concluded after a panel discussion involving author of the bestselling books "The Devil's Element" and "The Death and Life of the Great Lakes". During the discussions, a number of important questions were raised by the active, international online audience.

This video contains a short summary of the Morning session, and the recording of the afternoon session.

The presentations can be found here:
Presentations from the morning session of the Phosphorus Science Policy workshop - EuChemS

More info on this event can be found here:
The role of Chemicals in our daily life: The Phosphorus element - feeding the world and beyond - EuChemS

https://erc.europa.eu/homepage

The ERC's plan for 2024 adopted

10 July 2023

The ERC's 2024 Work Programme has been today adopted by the European Commission. The plan includes new elements in the assessment of research proposals and candidates' CVs, and in the evaluation process. It also introduces lump sum funding in Advanced Grants and makes changes in the structure of evaluation panels.

More Details: The ERC's plan for 2024 adopted | ERC (europa.eu)

The ERC funds 66 grantees to unlock commercial and societal potential of their research

27 July 2023

The European Research Council (ERC) has announced 66 new Proof of Concept Grants in the second round of the 2023 competition. Worth €150 000 each, the grants help ERC grantees explore the commercial or societal potential of their research findings. This funding is part of the EU's research and innovation programme, Horizon Europe.

More Details:
The ERC funds 66 grantees to unlock commercial and societal potential of their research | ERC (europa.eu)

EMBO Gold Medal 2023 awarded to ERC grantee

29 June 2023

Julia Mahamid from EMBL Heidelberg wins the EMBO Gold Medal 2023 for innovative research on structural cell biology and 3D microscopy.

More Details: EMBO Gold Medal 2023 awarded to ERC grantee | ERC (europa.eu)

https://erc.europa.eu/homepage

Graz University of Technology researcher gets ERC Proof of Concept Grant | INVEST in AUSTRIA

25 May?
https://investinaustria.at/en/news-events-press/graz-university-of-technology-researcher-gets-erc-proof-of-concept-grant

The ERC's plan for 2024 adopted | ERC

10 July
The ERC's plan for 2024 adopted | ERC (europa.eu)

New Frontiers of Research podcast

11 July
Podcast | ERC (europa.eu)

Lithium: a decarbonisation game-changer?

2 May
Lithium: a decarbonisation game-changer? | ERC (europa.eu)

Changes in the evaluation of proposals for ERC grants

17 July
Changes in the evaluation of proposals for ERC grants | ERC (europa.eu)

Opinion: The journey to responsible and experimental research funding

17 July
Opinion: The journey to responsible and experimental research funding | ERC (europa.eu)

ERC grant competitions 2024 (interactive webinar)

20 September 2023
ERC grant competitions 2024 | ERC (europa.eu)

The ERC funds 66 grantees to unlock commercial and societal potential of their research | ERC

27 July
The ERC funds 66 grantees to unlock commercial and societal potential of their research | ERC (europa.eu)

Three Irish academics awarded EU grants to commercialise research

27 July
Three Irish academics awarded EU grants to commercialise research (siliconrepublic.com)

Science & Truth – (Incl. Peritia Project final roundup)

Peritia Project Closes with Successes

Thank you from PERITIA!

As the Peritia the project drew to a close, Peritia organisers extended our warmest thanks to everyone who contributed to our final academic conference, 'Rethinking Policy, Expertise and Trust'. As you will read below, these three days at University College Dublin were jam-packed with paper presentations and panel discussions, with over 200 participants in attendance.

From 23–25 March, the **UCD O'Brien Centre for Science** hosted our final academic conference**,** covering a breadth of topics encompassed by PERITIA's investigation of public trust in expertise and examined by scholars from a wide range of disciplines.

The final closing event in Brussels took place on 4–5 May, 'Research Insights for European Policymaking'. Read all about the exciting programme lined up (spoiler alert: it includes a bespoke policy simulation!) and other project milestones in this penultimate newsletter below.

With every ending, a new beginning...

After more than three years of research activities, the PERITIA project is finally drawing to a close. Under the stalwart leadership of **Maria Baghramian** and the invaluable guidance of the advisory board, team members and work package leaders produced output that comprises no fewer than 23 scientific publications, two podcast series, white papers, policy reports, and 12 newsletters. Additionally, the team, often in conjunction with local partners, held numerous conferences and events over the years – even during the pandemic, when lockdowns forced a transition into a digital format. The project ended with a two-day event at the heart of the European Union in Brussels: '**Research Insights for European Policymaking**'. Read all about the event's highlights as well as reflections from principal investigators in our final newsletter.

Final newsletter No12 here: - https://mailchi.mp/d8fca6fd771f/with-every-ending?e=[UNIQID]

The previous 11 Newsletters are here: - https://peritia-trust.eu/peritia-newsletter
The newsletters especially No 12 have many active links to reports.

Stayed Tuned…. What's next?

While the PERITIA project has come to its natural end, the truly impressive volume of research and outputs produced over the past three years will remain available on the website, including the Trust Hub and the Trustworthiness Toolkit. The PERITIA YouTube channel and twitter account will also

continue to be accessible, where there are dozens of lectures, webinars, talks, and other events for your perusal.

PERITIA Research Culminates in Closing Event in Brussels

See the following web page:

[PERITIA Research Culminates in Closing Event in Brussels • (peritia-trust.eu)]

It reports more directly the events over the two days under headings such as:

Trust in Science at Risk?

Welcome to the Pangean Union! - a social simulation exercise with a linked video.

Policy Roundtable

At the core of this event was the Policy Roundtable, moderated by Toby Wardman of SAPEA and featuring input from PERITIA's Bobby Duffy, Liam Delaney, Cathrine Holst, and José van Dijck in interchange with David Mair and Katja Reppel of the European Commission.

Deliberations on Climate, Transport Policy and Expertise

How to Determine the Trustworthiness of an Expert

'The Trust Race': Cultivating a Climate of Trust

The Kids Are All Right

Policy, Expertise and Trust in Action (PERITIA) this presentation gives an overview:

259294_18e0b80f-5
493-4605-be9c-ab7b

Or paste this link to a browser.

https://assets.gov.ie/259294/18e0b80f-5493-4605-be9c-ab7b7f2bdf3e.pptx

Links to articles under the topic Science & Truth

Medical Pseudoscience around the World
Rise of Ayurveda: A Dangerous Trend to Decolonize the Scientific Method
https://skepticalinquirer.org/volume/no-3-vol-47
Rise of Ayurveda: A Dangerous Trend to Decolonize the Scientific Method | Skeptical Inquirer

Synthetic data could be better than real data
27 April
Synthetic data could be better than real data (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01445-8

Racial inequalities in journals highlighted in giant study
28 April
Racial inequalities in journals highlighted in giant study (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01457-4

Chemist in India loses seven papers, blames outsourcing of images – Retraction Watch
3 May ?
Chemist in India loses seven papers, blames outsourcing of images – Retraction Watch

Fake scientific papers are alarmingly common | Science | AAAS
9 May
https://www.science.org/content/article/fake-scientific-papers-are-alarmingly-common

Stephen Wolfram: ChatGPT and the Nature of Truth, Reality & Computation | Lex Fridman Podcast #376
9 May
(432) Stephen Wolfram: ChatGPT and the Nature of Truth, Reality & Computation | Lex Fridman Podcast #376 - YouTube

Study reveals scale of 'science scam' in academic publishing | Financial Times
11 May
https://www.ft.com/content/76abf920-effb-4d66-8fb2-3ff842150297

Deep fake detection and classification using error-level analysis and deep learning | Scientific Reports
8 May
Deep fake detection and classification using error-level analysis and deep learning | Scientific Reports (nature.com)
DOI: https://doi.org/10.1038/s41598-023-34629-3

Prominent nanoscientist retracts paper after PhD students flagged error – Retraction Watch
5 April
Prominent nanoscientist retracts paper after PhD students flagged error – Retraction Watch

Paper with authorship posted for sale retracted nearly two years after Retraction Watch report – Retraction Watch
12? May
Paper with authorship posted for sale retracted nearly two years after Retraction Watch report – Retraction Watch

Weekend reads: Paying cash to boost rankings; billions lost from reformatting manuscripts; 'the truth police' – Retraction Watch

13? May

Weekend reads: Paying cash to boost rankings; billions lost from reformatting manuscripts; 'the truth police' – Retraction Watch

Meteorologists targeted in climate misinfo surge

13 May

Meteorologists targeted in climate misinfo surge (phys.org)

Is it the beginning of the end for scientific publishing? – podcast | Science | The Guardian

16 May

https://www.theguardian.com/science/audio/2023/may/16/is-it-the-beginning-of-the-end-for-scientific-publishing-podcast

Replication of room-temperature superconductor claims fails to show superconductivity

17 May

Replication of room-temperature superconductor claims fails to show superconductivity (phys.org)

DOI: 10.1038/s41586-023-06162-w

Weekend reads: Study claiming masks harm is retracted; papers lead to high treason charges; paying to publish in fake journals – Retraction Watch

20 May

Weekend reads: Study claiming masks harm is retracted; papers lead to high treason charges; paying to publish in fake journals – Retraction Watch

AI 'Cheating' Is More Bewildering Than Professors Imagined - The Atlantic

16 May

AI 'Cheating' Is More Bewildering Than Professors Imagined - The Atlantic

Is the biggest challenge to scientific thinking science itself?

22 May

Is the biggest challenge to scientific thinking science itself? (nature.com)

DOI: https://doi.org/10.1038/d41586-023-01709-3

Council calls for transparent, equitable, and open access to scholarly publications – Consilium

23 May

Council calls for transparent, equitable, and open access to scholarly publications - Consilium (europa.eu)

VERITY project launched to promote trust in science

9 May

VERITY project launched to promote trust in science - EuChemS magazine and see Verity website: Home (verityproject.eu) This website is at early build stage. Overlaps with Preitia Project.

Dutch university can revoke PhD for fake data, court rules – Retraction Watch

22 May

Dutch university can revoke PhD for fake data, court rules – Retraction Watch

Anonymizing peer review makes the process more just

26 May

Anonymizing peer review makes the process more just (nature.com)

DOI: https://doi.org/10.1038/d41586-023-01772-w

Avoiding the Empty Review: Answering "How Novel and Significant Is This Research?" as a Peer Reviewer | Chemistry of Materials
23 May
https://pubs.acs.org/doi/10.1021/acs.chemmater.3c01046
https://doi.org/10.1021/acs.chemmater.3c01046

Three journals' web domains expired. Then major indexes pointed to hijacked versions – Retraction Watch
26 May
https://retractionwatch.com/2023/05/26/three-journals-web-domains-expired-then-major-indexes-pointed-to-hijacked-versions

A Shocking Amount of Neuroscience Papers May Be Faked – And That's Before ChatGPT
27 May
A Shocking Amount of Neuroscience Papers May Be Faked - And That's Before ChatGPT : ScienceAlert

Weekend reads: A Nobel winner's seventh retraction; Stanford's president fights back; what should go into a retraction notice – Retraction Watch
? May
Weekend reads: A Nobel winner's seventh retraction; Stanford's president fights back; what should go into a retraction notice – Retraction Watch

Anonymizing peer review makes the process more just (Subscription)
26 May
Anonymizing peer review makes the process more just (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01772-w

AI intensifies fight against 'paper mills' that churn out fake research
31 May
AI intensifies fight against 'paper mills' that churn out fake research (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01780-w

EU council's 'no pay' publishing model draws mixed response
2 June
https://www.nature.com/articles/d41586-023-01810-7
DOI: https://doi.org/10.1038/d41586-023-01810-7

Revealed: the millions of dollars in time wasted making papers fit journal guidelines
8 June
Revealed: the millions of dollars in time wasted making papers fit journal guidelines (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01846-9

How a now-retracted study got published in the first place, leading to a $3.8 million NIH grant – Retraction Watch
9 June
https://retractionwatch.com/2023/06/09/how-a-now-retracted-study-got-published-in-the-first-place-leading-to-a-3-8-million-nih-grant

'Science was heard': woman who was convicted of killing her children pardoned after inquiry
6 June

‘Science was heard’: woman who was convicted of killing her children pardoned after inquiry (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01871-8

Vindicated MIT professor says probe into his lab did lasting damage

14 June
Vindicated MIT professor says probe into his lab did lasting damage (statnews.com)

Opinion: A Defence of Merit or a Case for Sustaining the Biases in Science?

12 June
Opinion: A Defence of Merit or a Case for Sustaining the Biases in Science? – The Wire Science

Paper retracted more than eight months after author admitted to plagiarism – Retraction Watch

20 June
Paper retracted more than eight months after author admitted to plagiarism – Retraction Watch

Science Philosophy in a Flash - A Scientific Figure of Speech

22 June
| The Scientist Magazine® (the-scientist.com)

War shattered Ukrainian science — its rebirth is now taking shape

22 June
War shattered Ukrainian science — its rebirth is now taking shape (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02031-8

Plagiarism scandal engulfs high-profile academic in Latvia – Retraction Watch

23 June
Plagiarism scandal engulfs high-profile academic in Latvia – Retraction Watch

In a Tipster’s Note, a View of Science Publishing’s Achilles Heel – Retraction Watch

21 June
In a Tipster's Note, a View of Science Publishing's Achilles Heel (undark.org)

Nobel prize winner Giorgio Parisi: ‘There’s a lack of trust in science – we need to show how it’s done’ | Physics | The Guardian

25 June
https://www.theguardian.com/science/2023/jun/25/giorgio-parisi-nobel-prize-physics-spin-glasses-complex-systems-in-a-flight-of-starlings

Why so many people have had enough of experts – and how to win back trust

28 June
https://theconversation.com/why-so-many-people-have-had-enough-of-experts-and-how-to-win-back-trust-206134

How can universities and journals better work together on research misconduct? – Retraction Watch

28 June
https://retractionwatch.com/2023/06/28/how-can-universities-and-journals-better-work-together-on-research-misconduc

Faith-based beliefs are inescapable in science

28 June
Faith-based beliefs are inescapable in science - Big Think

Science paper marked with expression of concern after readers pointed out data issue – Retraction Watch
29 June
Science paper marked with expression of concern after readers pointed out data issue – Retraction Watch

Weekend reads: A professor who plagiarized his students; how many postgrads in China think it's OK to fake data; fighting fraud – Retraction Watch
1 July
Weekend reads: A professor who plagiarized his students; how many postgrads in China think it's OK to fake data; fighting fraud – Retraction Watch

Douglas Hofstadter thinks GPT-4 may undermine the "nature of truth on which our society is based"
9 July
Douglas Hofstadter thinks GPT-4 may undermine the "nature of truth on which our society is based" (the-decoder.com)

The future of academic publishing | Nature Human Behaviour
13 July
The future of academic publishing | Nature Human Behaviour
DOI: https://doi.org/10.1038/s41562-023-01637-2

Embrace the mess: How to choose which scientists to trust - Big Think
20 June
Embrace the mess: how to choose which scientists to trust - leaps.org

University finds former lecturer with two retractions plagiarized in seven publications – Retraction Watch
13 July
University finds former lecturer with two retractions plagiarized in seven publications – Retraction Watch

Transformative agreements are the key to open access| Times Higher Education (THE)
14 July
Transformative agreements are the key to open access| Times Higher Education (THE)

Science funding agencies say no to using AI for peer review | Science | AAAS
14 July
Science funding agencies say no to using AI for peer review | Science | AAAS
DOI: 10.1126/science.adj7663

publications - Should scientific publishers be non-profit? - Academia Stack Exchange
14 July
publications - Should scientific publishers be non-profit? - Academia Stack Exchange

Machine learning-based guilt detection in text | Scientific Reports
15 July
Machine learning-based guilt detection in text | Scientific Reports (nature.com)
DOI: https://doi.org/10.1038/s41598-023-38171-0

People Believe in Conspiracy Theories For a Perfectly Logical Reason: ScienceAlert
17 July
People Believe in Conspiracy Theories For a Perfectly Logical Reason : ScienceAlert

DOI: https://doi.org/10.1037/bul0000392

The future of academic publishing | Nature Human Behaviour

13 July
The future of academic publishing | Nature Human Behaviour
DOI: https://doi.org/10.1038/s41562-023-01637-2

The true cost of science's language barrier for non-native English speakers

18 July
The true cost of science's language barrier for non-native English speakers (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02320-2 and
DOI: https://doi.org/10.1371/journal.pbio.3002184

Wavering impact-factor trajectories

19 July
Wavering impact-factor trajectories | Nature Biomedical Engineering
DOI: https://doi.org/10.1038/s41551-023-01075-5

How We Determine What to Believe as True

18 July
How We Determine What to Believe as True - NeuroLogica Blog (theness.com)

After honesty researcher's retractions, colleagues expand scrutiny of her work | Science | AAAS

18 July
After honesty researcher's retractions, colleagues expand scrutiny of her work | Science | AAAS

Stanford President Will Resign After Report Found Flaws in His Research

19 July
Stanford President Resigns After Report Finds Flaws in his Research - The New York Times (nytimes.com)

Journal asks scientist to step down from editorial board after sleuth's comments linked him to paper mill – Retraction Watch

19 July
Journal asks scientist to step down from editorial board after sleuth's comments linked him to paper mill – Retraction Watch

Journal to retract papers that cost its impact factor and spot in leading index – Retraction Watch

17 July
Journal to retract papers that cost its impact factor and spot in leading index – Retraction Watch

Sage retracting three dozen articles for 'compromised' peer review – Retraction Watch

21 July
Sage retracting three dozen articles for 'compromised' peer review – Retraction Watch

Study Finds a Key Way to Build Trust in Science - And It's Not Education: ScienceAlert

24 July
Study Finds a Key Way to Build Trust in Science - And It's Not Education : ScienceAlert
DOI: https://doi.org/10.1016/j.paid.2023.112340

Of data and transparency

25 July
Of data and transparency | Nature Computational Science
DOI: https://doi.org/10.1038/s43588-023-00499-y

‘A very disturbing picture’: another retraction imminent for controversial physicist

25 July
‘A very disturbing picture’: another retraction imminent for controversial physicist (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02401-2

Why I’m sceptical about a superconductor breakthrough | The Spectator

26 July
Why I’m sceptical about a superconductor breakthrough | The Spectator

Princeton professor objects to retraction of economics paper

27 July
Princeton professor objects to retraction of economics paper (insidehighered.com)

The black market for papers; the secret life of retractions; a ‘troublesome pattern’

29 July
Weekend reads: The black market for papers; the secret life of retractions; a ‘troublesome pattern’ – Retraction Watch

"Think of the Implications of Publishing"

17 July
"Think of the Implications of Publishing" (substack.com)

What the Stanford president’s resignation can teach lab leaders

27 July
What the Stanford president’s resignation can teach lab leaders (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02438-3

Scepticism around superconductor claims. (Subscription)

27 July
A spectacular superconductor claim is making news. Here’s why experts are doubtful | Science | AAAS
Preprint 1: [2307.12037] Superconductor Pb$_{10-x}$Cu$_x$(PO$_4$)$_{6O}$ showing levitation at room temperature and atmospheric pressure and mechanism (arxiv.org)
Preprint 2: [2307.12008] The First Room-Temperature Ambient-Pressure Superconductor (arxiv.org)

‘Open science’ advocates warn of widespread academic fraud | Financial Times

2 August
https://www.ft.com/content/fcad4a70-5ba0-4c42-bcec-332cf3b19f5d

Fighting fake 'facts' with two little words: A new technique to ground a large language model's answers in reality

1 August
Fighting fake 'facts' with two little words: A new technique to ground a large language model's answers in reality (techxplore.com)
DOI: 10.48550/arxiv.2305.13252

Helping science journalists and scientists learn from each other

4 August
Helping science journalists and scientists learn from each other (nature.com)
DOI: https://doi.org/10.1038/d43978-023-00113-9

Empirical evidence of widespread exaggeration bias and selective reporting in ecology | Nature Ecology & Evolution
3 August
Empirical evidence of widespread exaggeration bias and selective reporting in ecology | Nature Ecology & Evolution
DOI: https://doi.org/10.1038/s41559-023-02144-3

Open access is inevitable – only the 'how' remains up for discussion
26 July
Open access is inevitable – only the 'how' remains| THE Campus Learn, Share, Connect (timeshighereducation.com)

Artificial-intelligence search engines wrangle academic literature
7 August
Artificial-intelligence search engines wrangle academic literature (nature.com)
DOI: https://doi.org/10.1038/d41586-023-01907-z

Predatory journals entrap unsuspecting scientists. Here's how universities can support researchers
15 August
Predatory journals entrap unsuspecting scientists. Here's how universities can support researchers (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02553-1

Why authors publish in predatory journals
15 July
Predatory journals entrap unsuspecting scientists. Here's how universities can support researchers (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02553-1

The Corporate Capture of Open-Access Publishing
16 August
The Corporate Capture of Open-Access Publishing (chronicle.com)

15 Studies Have the Same Fake Author
17? August
Who are you, Dragan Rodriguez? Fifteen studies have the same fake author, sleuth finds – Retraction Watch

Use of AI Is Seeping Into Academic Journals—and It's Proving Difficult to Detect | WIRED
17 August
https://www.wired.com/story/use-of-ai-is-seeping-into-academic-journals-and-its-proving-difficult-to-detect

Thomas Kuhn On Scientific Revolution: How Does Scientific Change Work?
19 August
https://www.thecollector.com/thomas-kuhn-on-scientific-revolution

Want to speed up scientific progress? First understand how science policy works
21 August
Want to speed up scientific progress? First understand how science policy works (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02602-9

Want to speed up scientific progress? First understand how science policy works
21 August
Want to speed up scientific progress? First understand how science policy works (nature.com)
DOI: https://doi.org/10.1038/d41586-023-02602-9

Who Believes Unsubstantiated Claims? | Skeptical Inquirer

25 August

Who Believes Unsubstantiated Claims? | Skeptical Inquirer

Top science publisher withdraws flawed climate study

24 August

Top science publisher withdraws flawed climate study (phys.org)

DOI: 10.1140/epjp/s13360-021-02243-9

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31 August

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CAS Insights

Launch of CAS Insights introduces new destination for tracking scientific innovation trends and opportunities

Columbus, Ohio, USA – November 3, 2022 – Today, CAS, a division of the American Chemical Society that specializes in scientific information solutions, launched CAS Insights™, a new content hub at the intersection of science, technology, and innovation. Offering business and research leaders actionable perspectives on the latest developments across science and technology, CAS Insights draws on the human-curated data collection and deep scientific expertise from CAS to highlight emerging trends, unseen connections, new applications, and future opportunities across disciplines.

CAS Insights features articles, analytical reports, infographics, webinars, videos, and peer-reviewed journal publications on topics including sustainability, biotechnology, drug discovery, materials science, consumer goods, synthetic chemistry, digital R&D, and more. CAS is providing this resource to the scientific community at no cost to enable innovation leaders from the boardroom to the bench to gain a clearer view of the landscape and identify opportunities ahead so they can get breakthrough solutions to market faster.

“By the nature of our work curating, connecting, and analyzing scientific data published across the globe, CAS has a unique vantage point at the frontier of innovation that is the genesis of CAS Insights,” said CAS President Manuel Guzman. “Our close engagement with scientific innovation leaders through the pandemic and recent custom services initiatives has helped us realize the impact that sharing the insights gleaned from the breadth and depth of this perspective can have on advancing solutions to critical challenges and inspiring breakthroughs that improve people’s lives.”

For over 115 years, CAS has been a leader in scientific knowledge management providing data, enterprise solutions platforms, and expertise to leading innovators across commercial, academic, and government sectors. The CAS Content Collection™ is the largest human-curated collection of scientific data in the world covering discoveries published in more than 50 languages over the last 150 years. This curated dataset is built by a team of hundreds of scientists and technologists who connect the world’s science to accelerate discovery.

"Over the past decade, the pace of innovation has accelerated drastically and the percentage of published research that draws from multiple scientific disciplines has more than doubled in many areas, making the landscape more complicated to navigate and important trends and valuable opportunities harder to spot,” noted CAS Chief Scientific Officer Dr. Gilles Georges. “Our team of scientists and technologists takes great pride in using our unique capabilities and expertise to make these critical connections. For the first time, CAS Insights gives the world’s innovators access to the invaluable learnings and perspectives of these experts with their fingers on the pulse of scientific progress.”

With new content being added frequently, CAS Insights will feature high-interest topics including exosomes, microplastics, sustainable agriculture, 3D biomedical printing, and mRNA therapies in the

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CAS is a leader in scientific information solutions, partnering with innovators around the world to accelerate scientific breakthroughs. CAS employs over 1,400 experts who curate, connect, and analyse scientific knowledge to reveal unseen connections. For over 100 years, scientists, patent professionals, and business leaders have relied on CAS solutions and expertise to provide the hindsight, insight, and foresight they need so they can build upon the learnings of the past to discover a better future. CAS is a division of the American Chemical Society. Connect with us at cas.org.

Media contact:

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Company Information:

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This section has extensively covered various aspects of solar cells with considerable coverage of Perovskite Solar Cells. Time to ask what is perovskite and what are its chemical and physical properties.

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“Silicon has been the primary semiconductor material used in solar cells since the 1950s, as its semiconducting properties align well with the spectrum of the sun’s rays and it is relatively abundant and stable. However, the large silicon crystals used in conventional solar panels require an expensive, multi-step manufacturing process that utilizes a lot of energy. In the search for an alternative, scientists have harnessed the tunability of perovskites to create semiconductors with similar properties to silicon. Perovskite solar cells can be manufactured using simple, additive deposition techniques, like printing, for a fraction of the cost and energy. Because of the compositional flexibility of perovskites, they can also be tuned to ideally match the sun’s spectrum”.

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The Next Generation of Fuel Cells: Powered by Quantum Computing

22 August

The Next Generation of Fuel Cells: Powered by Quantum Computing (bmwblog.com)

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Account Manager
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086 389 8647
andreina.moran@sial.com

Nuclear Fusion Power - Saving Angel or Optimistic Dream? & Developments in Nuclear Technology

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Bill Gates Says New Project is a Nuclear Breakthrough - TheStreet

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6 May
I'm in Wyoming to celebrate the next nuclear breakthrough | Bill Gates (gatesnotes.com)

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SFI News, Updates & Reports

31 May 2023

SFI News

This month's SFI News includes the announcement of SFI Frontiers for the Future awards, a feature on health research, and information on current funding opportunities.

Minister Harris announces investment of €42 million through the SFI Frontiers for the Future Programme

These 62 grants to support research across 13 HEIs are funded in collaboration with Children's Health Foundation and Geological Survey Ireland. Read more

Liebherr and Lero partner to further develop the smart shipping container cranes of the future

Minister Norma Foley TD launched a research partnership between Liebherr Container Cranes Ltd, SFI Research Centre Lero, and Munster Technological University. Read more

Health Research Feature

As scientific research digs deeper into the roots of health and disease, new and more targeted treatments are emerging. Getting the right treatment to the right patient at the right time lies at the heart of these more effective treatments. Read about some of the research SFI funds that is working to enable these developments.

Health Research

Future SFI Research Centres Programme

The future evolution of the SFI Research Centres programme is a key objective of SFI Strategy 2025. In 2021 a panel of international experts was convened to advise SFI on a future model for this programme. The expert panel engaged with key stakeholders and produced a report.

SFI continues to finalise the development of the upcoming programme call. More information on the future of the SFI Research Centres programme, as well as a recording from an information webinar hosted in May, is available on our website:

SFI Research Centres Programme

Funding Opportunities

The [SFI Industry RD&I Fellowship Programme] supports academia-industry interactions in order to address industry-informed challenges. Deadline for Call A is **13th June 2023**.

The [SFI Discover Programme 2023] Call is open. Applicants are encouraged to submit proposals that create opportunities for broader participation and engagement of the public with STEM. Deadline is **27th June 2023.**

The [SFI Research Infrastructure Programme] supports the research community in building and sustaining the required infrastructural capacity to accomplish innovative research. Expression of Interest deadline is **28th June 2023**.

The [SFI Frontiers for the Future Programme] provides opportunities for independent investigators to conduct highly innovative, collaborative research. The **Awards** stream is now open as a **rolling call**, remaining open for the foreseeable future, subject to budget availability.

#BelieveInScience

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Science Foundation Ireland sfi For what's next

SFI ARC Hub Programme

21 June 2023

The SFI ARC Hub programme is co-funded by the Government of Ireland and the European Union through the ERDF Northern and Western Regional Programme 2021-27 and the ERDF Southern, Eastern and Midland Regional Programme 2021-27.

SFI ARC Hub Programme

Science Foundation Ireland is pleased to announce that the SFI Accelerating Research to Commercialisation (ARC) Hub Programme has launched today.

The goal of the SFI ARC Hub Programme is to establish a new model for regional innovation and entrepreneurial training, that will catalyse a step-change in the translation of cutting-edge publicly-funded research toward impact at a regional level. This Programme will enhance and accelerate the commercialisation of research to create new products, processes and services.

The SFI ARC Hub Programme will support the establishment of up to three SFI ARC Hubs, each operating in a specific thematic area aligned with the respective regional strategic priorities and the 'National Smart Specialisation Strategy for Innovation 2022-2027' (S3).

The Programme is co-funded by the Government of Ireland (€52.67 million) and the European Union (€46.67 million). It is funded through two regional Programmes: the ERDF Northern and Western Regional Programme 2021-2027 (€34.66 million) and the Southern, Eastern and Midland Regional Programme 2021-27 (€64.66 million).

The closing date for applications is 22nd September 2023, 13:00 Dublin Local Time.

Further information on the SFI ARC Hub Programme and how to apply is available here:

SFI ARC Hub Programme

e-Alert: June 2023

SFI Industry RD&I Fellowship Programme

Call A closing 13th June

Call B 3rd October

SFI reminds researchers that the **SFI Industry RD&I Fellowship Programme** 2023 Call A submission deadline is 13 June 2023, 13:00 (Dublin local time).

This programme, supporting academic partnerships with industry, is run in collaboration with Enterprise Ireland and IDA Ireland. Grants can be awarded to academic researchers wishing to spend time in industry to support industry-informed research and the exchange of knowledge and expertise between academia and industry.

The **SFI Industry RD&I Fellowship LinkedIn** group allows academic researchers and prospective industry partners to network and identify opportunities to apply.

Further information on the Programme and application is available on our website:

SFI Industry RD&I Fellowship Programme

Contact Us

Tel: +353 (0) 1 6073200 **I Email:** info@sfi.ie **I Web:** www.sfi.ie

e-Alert: June 2023

SFI Science Policy Research Call 2023

Science Foundation Ireland is pleased to launch the

SFI Science Policy Research Call 2023.

The SFI Science Policy Research Programme provides opportunities for postdoctoral researchers and established researchers to conduct research that can help shape science funding policy in Ireland.

For more information on the programme and how to apply please visit:

SFI Science Policy Research Call 2023

e-Alert: June 2023

EPSRC-SFI Joint Funding of Research

Science Foundation Ireland would like to notify members of the research community that the call guidance documentation and templates for preparing submissions to the **EPSRC-SFI Joint Funding of Research programme** have been updated. This is to reflect changes in the submission process for full applications to EPSRC, which has now completed its migration to the new UKRI Funding Service. The overall process of preparing and submitting an application to the programme is otherwise unchanged. More information can be found on the programme web page linked below

EPSRC-SFI Joint Funding of Research

If you have any questions please contact **partnerships@sfi.ie**

Contact Us

Tel: +353 (0) 1 6073200 **I Email:** info@sfi.ie **I Web:** www.sfi.ie

SFI News

29 June 2023

This month's SFI News includes the celebration of this year's Curious Minds awards winners, some 47 new teams joining the National Challenge Fund, and information on current funding opportunities.

Minister Harris announces 422 primary schools receiving the Curious Minds Award 2023

The awards recognise innovative approaches to STEM learning and engagement. Read more

Insight 10th anniversary report shows economic impact of the SFI Research Centre for Data Analytics

The Centre, which is hosted across Dublin City University, University College Cork, University College Dublin and University of Galway highlights its value to the Irish economy at €1.1bn. Read more

Teams join four more Challenges in the National Challenge Fund

The 47 teams were announced by Minister Harris, and have already begun their training in the Concept phase of the OurTech, A Healthy Environment for All, Energy Innovation and Digital for Resilience Challenges. Read more

Hear from previous RD&I Industry Fellows

If you're thinking of getting involved in the SFI RD&I Industry Fellowship Programme but want to hear what it's like from the inside, you can read the experiences of Dr Marco Monopoli, Associate Professor Marcus Baumann, Dr James Murray (pictured) and Dr Ming Zhao on the funding call page.

A Fellow's Life

Celebrate with Curious Minds

As well as Minister Harris's visits to schools, the Curious Minds awards were celebrated with a live webcast, now available on playback. Join Mary-Claire (MC) and Phil Smyth along with special guests announcing Silver, Gold and Platinum Awards.

SFI Curious Minds Programme

Funding Opportunities

The SFI ARC Hub Programme call is open. The programme will enhance and accelerate the commercialisation of research to create new products, processes and services. Abstracts are due on **21st July 2023,** and full proposals on **22nd September 2023.**

The Science Policy Research Programme 2023 call is open. The call will fund projects to develop and support science policy research in Ireland building towards pragmatic and practical recommendations in the short term. The deadline is **8th September 2023.**

The SFI Industry RD&I Fellowship Programme supports academia-industry interactions in order to address industry-informed challenges. Deadline for Call B is **3rd October 2023**.

The SFI Research Infrastructure Programme supports the research community in building and sustaining the required infrastructural capacity to accomplish innovative research. Full proposal deadline is **28th July 2023**.

The SFI Frontiers for the Future Programme provides opportunities for independent investigators to conduct highly innovative, collaborative research. The **Awards** stream is now open as a **rolling call**, remaining open for the foreseeable future, subject to budget availability.

e-Alert: July 2023

Royal Society – Science Foundation Ireland University Research Fellowship

The Royal Society and **Science Foundation Ireland** are pleased to announce that the University Research Fellowship 2024 call is now open!

The Royal Society – Science Foundation Ireland University Research Fellowship scheme is for outstanding scientists based within eligible research bodies in the Republic of Ireland who are in the early stages of their research career and have the potential to become leaders in their field. It enables early career researchers to apply for up to eight years' research funding including salary and research costs.

The deadline for submission to the University Research Fellowship 2024 call Is **7th September 2023 at 3:00 pm (UK time)**.

An information webinar will be held on **Thursday 20th July 2023**. Details of the webinar and further information on the programme (including all eligibility criteria) is available here:

University Research Fellowship Programme

Contact Us

Tel: +353 (0) 1 6073200 **I Email:** info@sfi.ie **I Web:** www.sfi.ie

e-Alert: July 2023

SFI Public Service Fellowship Programme 2023

An opportunity to make a difference

Science Foundation Ireland is pleased to launch the 2023 call for the SFI Public Service Fellowship Programme. This programme offers researchers, **from both STEM and non-STEM disciplines** and at a range of career stages, a unique opportunity to be seconded to Government Departments and Agencies. Successful applicants will work on specific projects where they can add value with mutually beneficial outcomes. All participating Host Organisations and project outlines are available on the SFI Public Service Fellowship webpage.

SFI Public Service Fellowship Call Page

Fellowships can run from 6 to 12 months in duration if full time, or for between 12 and 24 months, if part time. The maximum Public Service Fellowship award amount is €100,000 in direct costs.

SFI will provide an information webinar on the SFI Public Service Fellowship call on our website shortly to be followed by a live Q&A session in August 2023 (full details to follow)

Application Deadline

13:00 (Dublin local time), October 5th, 2023

For general queries, including information on eligibility, applicants are advised to contact the Research Office of the Research Body they intend to submit their application to. For additional information or clarification, contact: **psfellowship@sfi.ie**

Contact Us

Tel: +353 (0) 1 6073200 **I Email:** info@sfi.ie **I Web:** www.sfi.ie

SFI News

31 May 2023

This month's SFI News includes a feature on SFI supported Sustainable Living Research, information on current funding opportunities, and SFI-funded researchers featured in the media.

Sustainable Living Research Feature

We know we need to live more sustainably, in order to protect our environment and the life it supports. But how? Whether it's making more from what we have, taking the heat out of energy-intensive processes or supporting better ways to reduce climate-damaging emissions, Science Foundation Ireland is supporting research for a better way of doing things. Read about some of the research SFI funds in this area:

SFI supported Sustainable Living Research

Current Funding Opportunities

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he [SFI Public Service Fellowship Programme] offers researchers an opportunity to work in Government Departments and Agencies on projects where they can add value resulting in mutually beneficial outcomes. Deadline is **5th October 2023**.

The [Royal Society - SFI University Research Fellowship] is for outstanding scientists in Ireland who are in the early stages of their career and have the potential to become leaders in their field. Deadline is **7th September 2023**.

The [SFI ARC Hub Programme] will support the establishment of up to 3 SFI ARC Hubs, each operating in a specific thematic area aligned with the respective regional strategic priorities. **Full proposal** deadline is **22nd September 2023**.

The [SFI Industry RD&I Fellowship Programme] supports academic researchers wishing to spend time in industry worldwide through the temporary placement with an industry partner. Call B deadline is **3rd October 2023**.

The **SFI Frontiers for the Future Programme** provides opportunities for independent investigators to conduct highly innovative, collaborative research. The **Awards** stream is open as a **rolling call**.

The **SFI Science Policy Research Programme** 2023 Call is open. This programme aims to develop and support science policy research in Ireland. Deadline is **8th September 2023**.

e-Alert: August 2023

SFI Public Service Fellowship Programme 2023

Information Webinar

You can now see an information webinar for the SFI Public Service Fellowship webpage. For any queries on the programme, please contact us at psfellowship@sfi.ie

Online Q&A

An online Q&A session will be held via Zoom on **Tuesday 29th August from 2-3pm**. Registration for the session is required at this link [link to Meeting Registration - Zoom] .

Meeting Registration

In-person Networking Event

We're also holding an in-person networking meeting on the **morning of Wednesday 13th September** at the SFI offices at Three Park Place, Dublin 2. This event will allow interested applicants to meet with Host Organisation representatives to learn more about the projects on offer. Places will be offered on first-come, first-served basis. Please register your interest in attending at this link

Networking Session Tickets

The deadline for applications is October 5th, 2023.

Institute of Chemistry of Ireland as a Co-Owner Benefits when you publish in PCCP

Physical Chemistry Chemical Physics
21 August 2023, Issue 31,
Page 20763 to 21112

Phys. Chem. Chem. Phys., 2023,**25**, 20775-20776
https://doi.org/10.1039/D3CP90127K

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The journal has a broad scope which includes spectroscopy, dynamics, kinetics, statistical mechanics, thermodynamics, electrochemistry, catalysis, surface science, quantum mechanics and theoretical developments play an important part in the journal. Interdisciplinary research areas such as polymers and soft matter, materials, nanoscience, surfaces/interfaces, and biophysical chemistry are especially welcomed whenever they include a physico-chemical approach.

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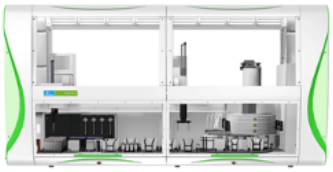

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IDA Updates & Reports

https://www.idaireland.com

Dexcom selects Ireland for first European manufacturing site

5 May 2023

- Athenry, Galway identified as the site for new, state-of-the-art global continuous glucose monitoring manufacturing facility
- New facility represents a €300 million investment over five years and the potential to bring up to 1,000 high-skilled jobs to the region

Athenry, Co. Galway– May 5 2023 – IDA Ireland, together with Simon Coveney TD, Minister for Enterprise, Trade and Employment, announced today that Dexcom, Inc., a global leader in continuous glucose monitoring for people with diabetes, plans to build its newest global manufacturing facility in Athenry, Galway. The project is supported by the Irish Government through IDA Ireland and represents an investment of €300 million over five years and the potential to create up to 1,000 high skilled jobs over the same period.

Read more:

Dexcom selects Ireland for first European manufacturing site | IDA Ireland

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IDA Updates & Reports

https://www.idaireland.com

Boston Scientific Announces €80M Investment and 400+ Jobs at Clonmel Site

19 May 2023

CLONMEL, IRELAND 19 May 2023 - Boston Scientific Corporation (NYSE: BSX) will today announce an €80 million investment in its Clonmel operations at an event celebrating the site's 25th anniversary with Taoiseach Leo Varadkar. The funding, supported by the Irish government through IDA Ireland, will go towards the continued expansion of the company's medical technology manufacturing and research and development (R&D) capabilities and is expected to enable 400+ jobs in the coming years.

The new investment will increase office and manufacturing space and transition the entire site to source more than 90% of its energy needs from renewable sources. This is part of the company's broader sustainability commitment to achieve carbon neutrality by 2030.

Read more:

Boston Scientific Announces €80M Investment and 400+ Jobs at Clonmel Site | IDA Ireland

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Email: idaireland@ida.ie

IDA Updates & Reports

IDA Ireland

https://www.idaireland.com

New institute for clinical trials in Ireland opens in Galway

A new institute dedicated to clinical trials is being launched at the University of Galway.

The Institute for Clinical Trials, which will be led by Prof Peter Doran, will aim to make the latest clinical research and medicines available to patients in Ireland to improve their outcomes.

Doran joined the University of Galway's College of Medicine, Nursing and Health Sciences earlier this year to become director of the clinical trials institute, overseeing scientists as they work to develop new treatments, medical diagnostics and preventative therapies.

Prof Ciarán Ó hÓgartaigh, president of the University of Galway, said the institute will "chart new paths in research" for the health and wellbeing of people in Ireland and abroad "at their most vulnerable time".
"Research is critical to the healthcare ecosystem. Patients who attend hospitals that are research active have better outcomes," added Doran.

"[This is] due to both increased access to early lifesaving treatments and through the culture that pervades when research and inquiry are at the core of the health systems."

Doran said that the institute will aim to address some of the barriers that prevent indigenous medtech companies from conducting clinical trials in Ireland.

"The cross-sectoral activities of the Institute for Clinical Trials will be nationally distinctive, will align with Ireland's regional development strategies and will enhance economic competitiveness by attracting investment, jobs and talent."

Compared to similarly-sized countries such as Denmark and Finland, Ireland attracts significantly fewer clinical trials, accounting for only an 18pc share between the three nations, compared to Finland's 29pc and Denmark's impressive 53pc.

This is according to a survey conducted last year by the Irish Pharmaceutical Healthcare Association, which collected and analysed clinical trial data between 2013 and 2021 from a database provided by the US Library of Medicine.

The institute is being officially launched by Noreen Doyle, an entrepreneur and parent of two of children who survived cancer in their childhood thanks to treatments available through clinical trials.

"In 2007 we entered our two year-old son, James, into a clinical trial following his diagnoses of acute lymphoblastic leukaemia with the hope that it would help children in the future to fight cancer," said Doyle.

"Little did we know then that it would actually be his little sister, Kate, 10 years later, who would be one of those children to benefit greatly from this exact trial."

Vish Gain
This article originally appeared on www.siliconrepublic.com and can be found here:
https://www.siliconrepublic.com/innovation/institute-for-clinical-trials-ireland-university-of-galway-peter-doran

Image Credit
Prof Peter Doran and Noreen Doyle. Image credit: Andrew Downes/Xposure

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Prof Philip Nolan to lead new Irish research funding agency

2 June 2023

The upcoming agency will combine the functions of the IRC and SFI and is expected to come into operation next year.

Prof Philip Nolan has been selected as the CEO-designate for the upcoming Research and Innovation funding agency.

This agency is still being established and is expected to come into operation next year, after a Research and Innovation Bill is passed. This bill will also merge the functions and activities of the Irish Research Council (IRC) and Science Foundation Ireland (SFI).

Nolan is currently the director general of SFI and will stay in this role until the establishment of the new agency. He became director general in January 2022, but was already regarded as a "distinguished researcher" and familiar face in Ireland before this role.

Nolan previously served as director of the UCD Conway Institute for Biomolecular and Biomedical Research, deputy president of University College Dublin and president of Maynooth University.

During his 10-year tenure at Maynooth, research income at the university increased by about 60pc. He was succeeded in this role by Prof Eeva Leinonen.

Before wrapping up his time in Maynooth, Nolan came into the public eye as chair of Ireland's National Public Health Emergency Team (NPHET), playing a critical role in Ireland's Covid-19 pandemic response.

Minister for Further and Higher Education, Research, Innovation and Science Simon Harris, TD, said Nolan's appointment will bring "continuity and leadership" to the early stages of the new agency.

"Professor Nolan will engage closely with my department, as well as the IRC, in progressing the body of work required to ensure the agency is prepared to serve the research community well, shortly after the enactment of the legislation," Harris said.

"Researchers can be reassured that there will be no interruption to ongoing services and funding programmes while the new agency is being set up. It will be business as usual in the IRC and SFI."

Nolan said he will work with “all stakeholders” to bring the strengths of both the SFI and the IRC together and “to get the very best for all of us from the taxpayers’ investment in research and innovation”.

“This is a once-in-a-generation opportunity to drive a step change in public investment in research, and give us the talent, knowledge and expertise to address the major societal challenges and changes that we must confront over the coming decades,” Nolan said.

The upcoming agency is part of Ireland’s national strategy to boost research and innovation. This strategy – Impact 2030 – was launched last year by Minister Harris and aims to build a more inclusive and engaged research and innovation system in Ireland.

Leigh Mc Gowran
This article originally appeared on www.siliconrepublic.com and can be found here
Image credit: © Connor McKenna/SiliconRepublic.com

Zymeworks to establish a Clinical and Regulatory Operations European Headquarters in Dublin

26 June 2023

Minister for Further and Higher Education, Research, Innovation and Science Simon Harris today announced that Zymeworks Inc. (NASDAQ: ZYME), a global biotechnology company committed to the discovery, development and commercialization of novel, multifunctional biotherapeutics, is to establish a Clinical and Regulatory European Headquarters in Dublin with the creation of up to 20 new roles across activities such as regulatory affairs, clinical operations, clinical data management and support functions.

Zymeworks, which develops therapeutics to address difficult-to-treat cancers and other serious diseases has established an office in Dublin Airport Business Park, Swords and has recruited Jeffrey Smith, MD to serve as Senior Vice President of Early-Stage Development based in Dublin. The new Clinical and Regulatory European Headquarters will enable Zymeworks to coordinate clinical trials in the EU and progress early-stage clinical programs through its drug development process.

Read more: Zymeworks to establish a Clinical and Regulatory Operations European Headquarters in Dublin | IDA Ireland

IDA Ireland appoints new Head of Life Sciences & Food and Talent, Transformation, and Innovation Division

25 July 2023

IDA Ireland has appointed Rachel Shelly to the role of Divisional Manager, Life Sciences & Food and Talent, Transformation and Innovation. Rachel will play a key leadership role in IDA as she also joins IDA's Executive Leadership team.

Rachel joined IDA Ireland in 2006 where she spent 5 years based in IDA's New York office, managing corporate client relationships and new business development across the Content, Consumer, B2B Services and Engineering sectors. On returning to Ireland in 2011, Rachel was promoted to Project Manager in the Content, Consumer & Business Services (CCBS) division where she managed the CCBS East Coast territory. In 2018, she was appointed Department Manager, Medical Technologies, based in Athlone.

Read more:

IDA Ireland appoints new Head of Life Sciences & Food and Talent, Transformation and Innovation Division | IDA Ireland

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BD to Invest €30 Million in Enniscorthy Manufacturing Plant; Opens €4 Million R&D Centre in Dublin

2 June 2023

ENNICORTHY, WEXFORD, IRELAND (2 June 2023) – BD (Becton, Dickinson and Company) (NYSE: BDX), a leading global medical technology company, today announced it plans to invest €30 million to expand its manufacturing facility in Enniscorthy, Wexford, creating 85 new jobs.

The new 40,000 sq. ft. expansion will house operations to manufacture a new medical technology from BD's Peripheral Intervention business unit. The new investment in Enniscorthy follows other recent investments in the facility, including a €1.5 million project, supported by IDA, to install 1,300 solar panels to the facility, along with heat pumps totaling 1 Mega-watt. Together, this investment reduces annual kerosene use on site by 150,000 litres, eliminating 300 tonnes of carbon dioxide annually, which will help BD meet its 2030 environmental sustainability goals.

The announcement was made at a grand opening ceremony for BD's new €4 million research and development facility in Blackrock, Dublin. The new 10,600 sq. ft. purpose-built R&D facility in

Blackrock will house 35 high-tech workers and complements BD's R&D facility in Limerick, which employs more than 300 people.

Read More: BD to Invest €30 Million in Enniscorthy Manufacturing Plant; Opens €4 Million R&D Centre in Dublin | IDA Ireland

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Six MTU research teams bag €1.25m from SFI challenge fund

3 July 2023

Established only two years ago, MTU received the fifth highest funding from the National Challenge Fund of any Irish university.

Researchers based at Munster Technological University have secured €1.25m from Science Foundation Ireland (SFI) to fund research into a range of environmental and social issues.

The goal of the SFI National Challenge Fund, which is backed by the EU, calls on researchers to identify and solve problems related to Ireland's green transition and digital transformation. A total of 47 new Irish research teams joined the fund announced earlier this month.

Read more:

Six MTU research teams bag €1.25m from SFI challenge fund | IDA Ireland

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SuperNode invests €40m in R&D Initiative in Renewable Transmission Technology

18 July 2023

Dublin, Ireland – July 18th, 2023 – SuperNode today announced plans to continue its growth in Ireland through an investment of more than €40 million. This investment is intended to design, develop and manufacture High Temperature Superconducting ('HTS') cable systems. SuperNode is supported by the Irish Government through IDA Ireland.

SuperNode, is a technology company with 60+ staff operating out its Dublin technology centre, that develops revolutionary superconducting transmission technology for the renewable energy transition. Superconducting cables can transfer renewable electricity with reduced losses, costs and footprint compared to conventional cable technology. SuperNode uses liquid nitrogen to cool its cables to cryogenic temperatures and into a state of superconductivity, enabling incredibly efficient and high-density power transfer – up to 5 times more power than conventional cables at much lower voltage

levels. SuperNode's superconducting cables will be commercially available by the end of the decade and will be a key technology advancement to enable the renewable energy transition.

Read more:

SuperNode invests €40m in R&D Initiative in Renewable Transmission Technology | IDA Ireland

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IDA Ireland announces 2023 mid-year results

5 July 2023

Strong level of investment wins over the first half of 2023, in line with expectations

- **Number of strategic capital intensive and innovation investments announced**
- **Job and regional approvals remain strong**
- **FDI base proven to be resilient and impactful**

Performance to end H1 2023

- 139 investments won in the first half of 2023, with associated employment potential of over 12,000 jobs
- 52 new name investments and 67 (48%) of investments were approved for regional locations
- Investment and job results as expected in line with the strong investment flows seen since 2015
- Increased scale and complexity to the types of investment being secured, reflecting Ireland's strengths as a location to implement major projects
- 25 Research, Development and Innovation (RD&I) projects and 13 sustainability projects won in 2023 to date, outpacing results in same period last year as clients increase focus on transformational investments
- Healthy performance against a backdrop of a fragile global economy, with flat FDI into Europe, demonstrating continued resilience and growth across IDA's sectors of focus

Read more: IDA Ireland announces 2023 mid-year results | IDA Ireland

Charles River Laboratories completes €10m site expansion in Ballina to facilitate batch release testing

25 July

Charles River Laboratories International, Inc., a highly respected, global provider of drug discovery and non-clinical development solutions, today announced the completion of a €10M expansion of its testing capabilities at its Ballina, Co. Mayo site. The new Nearly Zero Energy Building (NZEB) certified space provides an additional 1,500m2 of lab space and creates up to 70 new skilled roles over the next two years. This project, which received significant support through IDA Ireland, demonstrates the commitment by Charles River and the Irish Government to meet the growing need for batch release testing of new Cell & Gene Therapies and mRNA platform therapies, such as the COVID-19 vaccines.

This expansion is the latest in a series at the Ballina site, where additional Good Manufacturing Practice (GMP) facilities and capabilities have been added in analytical, cell culture, vaccine support and other specialised Biologics services. The Company has established a dedicated laboratory space with Biosafety Level-3 (BSL-3) containment to handle testing of SARS-CoV-2 (the viral strain causing COVID-19) and other similar pathogens that cause human disease. This further investment in enhanced facilities and continuous staff development provides the increased range of testing services required by the international biopharmaceutical industry.

Read more:

Charles River Laboratories completes €10m site expansion in Ballina to facilitate batch release testing | IDA Ireland

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Ireland ranked a strong innovator in new EU scoreboard

28 July

The latest European Innovation Scoreboard found that 20 member states saw a growth in their innovation capabilities, but there is a geographical disparity in scores across the EU.

EU member states are managing to improve their innovation performance despite recent crises impacting the global economy, according to a new report.

The European Commission’s latest European Innovation Scoreboard suggests innovation performance has improved by nearly 9pc since 2016. This scoreboard looks at criteria such as research systems, investments, innovative SMEs and impacts to assess member states and their regions. Read more:

Ireland ranked a strong innovator in new EU scoreboard | IDA Ireland

Enterprise Ireland Updates & Reports

https://enterprise-ireland.com/en

Minister Simon Coveney leads US trade mission to New York and Boston to meet with key FDI clients and build on record high exports to the US in 2022

15th May, 2023

(L-R): Leo Clancy (Enterprise Ireland), Henry Reilly (bevcraft) Sadhbh Donnelly (Enterprise Ireland) Minister Simon Coveney, Darren Fenton (bevcraft) Ciaran Gorman (bevcraft), Pauline Mulligan (Department of Trade), Conor Bowden (mycaregorithim), Rory Power (Enterprise Ireland).

- **Irish exports to North America reached a record €5.5bn in 2022 and there was a 14% increase in FDI into Ireland.**
- **Enterprise Ireland and IDA Ireland Trade Mission will strengthen relationships with key US partners and promote world class Irish companies in the US**
- **Meetings with PM Group, IBM, Boston Scientific and HealthBeacon are on the agenda**

Minister for Enterprise, Trade and Employment, Simon Coveney T.D. is today leading a joint Enterprise Ireland and IDA Ireland Trade Mission to New York and Boston to boost trade relationships with key IDA client companies and promote world class Irish companies with leading market positions in the US. The Trade Mission is taking place on the back of record Irish exports to North America of $5.5bn in 2022. North America now accounts for 17% of all exports by Enterprise Ireland backed companies.

Read More: Minister Simon Coveney leads US trade mission to New York and Boston to meet with key FDI clients and build on record high exports to the US in 2022 - Enterprise Ireland (enterprise-ireland.com)

Enterprise Ireland hosts inaugural Food Innovation Summit in Cork. 31st May 2023

Pictured are: Leo Clancy, CEO, Enterprise Ireland; Noreen Gallagher, CEO at Plant-it; Jim Bergin, CEO at Tirlán, and Jenny Melia, Executive Director at Enterprise Ireland

- Highest ever year-on-year level of growth in Food and Sustainability exports, with exports increasing by 23% in 2022, reaching €16.2bn
- Enterprise Ireland-supported companies in the Food and Sustainability sector spent €209m in R&D activities in 2022
- 170 companies operating in the sector spent €100,000 or more on R&D activities in 2022
- Figures highlighted at Enterprise Ireland's inaugural Food Innovation Summit

Enterprise Ireland saw exports in the Food and Sustainability sector increase by 23% in 2022, reaching €16.2 billion. This is the highest ever level of growth for Enterprise Ireland supported companies in the Food and Sustainability sector, which in 2022 accounted for 50% of exports by Enterprise Ireland-supported companies.

The figures were highlighted today as more than 200 senior leaders from the Food sector, and key industry stakeholders attend Enterprise Ireland's flagship Food Innovation Summit, which is taking place today, 31 May, in Pairc Ui Chaoimh, Cork. The event is the first dedicated Food Innovation Summit to take place in Ireland and will turn the spotlight on the innovation capability within the Irish food industry and the strength of Ireland's food research ecosystem.

Food and Sustainability sector companies now account for 29% of total employment in Enterprise Ireland-supported companies. In 2022, 63,858 people were employed in companies that Enterprise Ireland supports in the Food and Sustainability sector – an increase of 3% on 2021 figures.

These companies spent €209 million in R&D activities in 2022. 170 companies operating in the sector spent €100,000 or more on R&D activities in 2022.

Read more: Enterprise Ireland hosts inaugural Food Innovation Summit in Cork - Enterprise Ireland (enterprise-ireland.com)

Minister Coveney and Minister Calleary launch new Enterprise Ireland Technology Gateway Programme

6th June 2023

(Pictured l-r) Lisa Moran, SRA, Minister Coveney, Mark Whelan, Senior Programme Manager, Enterprise Ireland, Marina Donohoe, Divisional Manager, Enterprise Ireland, Leo Clancy, CEO, Enterprise Ireland, Barry Guckian, NWRA

Today Minister for Enterprise, Trade and Employment, Simon Coveney T.D and Minister of State for Trade Promotion and Digital Transformation, Dara Calleary T.D. together with Enterprise Ireland announced €47 million of funding for the continuation of the Enterprise Ireland Technology Gateway Programme until 2029.

Charged with increasing the levels of interaction between Irish Industry and the Technological Universities (TU) and Institutes of Technology (IoT), the programme is co-financed by the Government of Ireland and the European Union through the ERDF Southern, Eastern & Midland Regional Programme 2021-27 and the Northern & Western Regional Programme 2021-27.

To date, over 4,500 companies have spent €60 million via the Technology Gateways collaborating with researchers in the TUs & IoTs. The majority of these companies are Small & Medium Enterprises who gain access to facilities and knowledge that would be unavailable to them without the Technology Gateways.

Read more:

Minister Coveney and Minister Calleary launch new Enterprise Ireland Technology Gateway Programme - Enterprise Ireland (enterprise-ireland.com)

FinalBend wins Enterprise Ireland's third level Student Entrepreneur Awards 2023

9th June 2023

The Minister for Enterprise, Trade and Employment, Simon Coveney, TD, today announced FinalBend as the winner of Enterprise Ireland’s Student Entrepreneur of the year Award at a ceremony in University College, Cork.
FinalBend is an innovative, sustainable affordable sportswear company, based in Cork. FinalBend was founded by University College, Cork student and Quercus Scholar, Emma Coffey.

Overall Winner of the Student Entrepreneur Awards, Emma Coffey of Final Bend with Minister for Enterprise, Trade and Employment, Simon Coveney, TD.

As a competitive pole vault athlete, Emma founded FinalBend to meet a need – for affordable, sustainable, attractive athletic clothing. Selling online at www.finalbendfitness.com orders are designed, packed and dispatched from the company's warehouse in Blackpool, Cork. Since its inception, FinalBend has grown through leveraging an authentic marketing style garnering over 75k followers and a 50k strong customer base.

Final Bend was one of ten finalists at the awards and the team received €10,000 as part of the Enterprise Ireland student prize. FinalBend will also receive mentoring from Enterprise Ireland to develop their products and explore new market opportunities. This is the 42nd year of Enterprise Ireland's Student Entrepreneur Awards, which are co-sponsored by Cruickshank, Grant Thornton and the Local Enterprise Offices. The awards are open to all third-level institutions across the country.

Read more:

FinalBend wins Enterprise Ireland's third level Student Entrepreneur Awards 2023 - Enterprise Ireland (enterprise-ireland.com)

Ministers Coveney and McGrath welcome first allocation of funding under Irish Innovation Seed Fund (IISF)

16Th June 2023

WakeUp Capital secure commitment of up to €35m from Fund

Minister for Enterprise, Trade and Employment, Simon Coveney TD, and the Minister for Finance, Michael McGrath TD have welcomed the announcement of a commitment of up to €35m to WakeUp Capital, in what is the first allocation from the Irish Innovation Seed Fund (IISF).

The Irish Innovation Seed Fund Programme was launched in 2022 and is a €90 million fund-of-funds, made up of a €30m investment from the Department of Enterprise, Trade and Employment, through Enterprise Ireland, which is matched by a €30m investment from the European Investment Fund, and a €30m co-investment from Ireland Strategic Investment Fund.

WakeUp Capital is an early stage impact fund focussing on sustainability and sustainable investment in the areas of clean energy and environmentally focussed investments such as innovative technology, agriculture solutions, waste treatment and energy technology as well as services and technologies that support financial inclusion. WakeUp Capital are targeting a fund of up to €50m and under the terms of the IISF, the funding partners can allocate up to 70% of a chosen fund.

Read more:
Ministers Coveney and McGrath welcome first allocation of funding under Irish Innovation Seed Fund (IISF) – Enterprise Ireland (enterprise-ireland.com)

€18m funding win for four Enterprise Ireland client companies in Horizon Europe EIC Accelerator

20th June 2023

Pictured left to right Martin O'Halloran, CSO & Co-Founder, Luminate Medical; Leo Clancy, CEO, Enterprise Ireland; Peter F Doyle, CEO & Co-Founder, BioSimulytics Limited; Marina Donohoe, R&I Divisional Manager, Enterprise Ireland; John Reid, Director, Celtic Biotech Ltd.

Four Enterprise Ireland-backed companies have won funding approvals of up to €18m in the latest competition under Horizon Europe's European Innovation Council (EIC) Accelerator Programme. The four successful companies are Luminate Medical, Hooke Bio, BioSimulytics, and Celtic Biotech.

Enterprise Ireland leads the National Support Network for Horizon Europe which helps entrepreneurs to compete and win funding in EIC competitions. To date, Irish companies have secured approvals totalling €129m under the EIC Programme since the beginning of Horizon Europe in 2021. **Read more:**

€18m funding win for four Enterprise Ireland client companies in Horizon Europe EIC Accelerator - Enterprise Ireland (enterprise-ireland.com)

XOCEAN welcomes Minister of State Dara Calleary to open new Technical Centre and announces the creation of 300 new jobs announcement supports rapid expansion of offshore wind

20th July 2023

XOCEAN, the leading provider of carbon-neutral ocean data, has today announced the creation of 300 new jobs as part of its strategic growth plan. The jobs announcement comes as the XOCEAN team welcomed Minister of State for Trade Promotion and Digital Transformation, Dara Calleary, to mark the official opening of its new Technical Centre near Carlingford, Co. Louth. From this facility, XOCEAN serves a growing list of international customers, primarily in the rapidly growing offshore wind market.

XOCEAN is transforming how ocean data is delivered, using innovative marine robotics known as Uncrewed Surface Vessels (USVs). This innovative technology is designed and manufactured by the company in Ireland. The new Technical Centre, located at Rathcor, Co. Louth, provides a state-of-the-art operational hub for the company's growing fleet with a team of highly qualified engineers and robotic experts ensuring that the vessels are serviced on returning from offshore missions all over the world.

Read more:

XOCEAN welcomes Minister of State Dara Calleary to open new Technical Centre - Enterprise Ireland (enterprise-ireland.com)

KTI publishes results of its Annual Knowledge Transfer Survey

24 August

The Annual Knowledge Transfer Survey, a comprehensive report on knowledge transfer activities in Ireland, has today published its findings for the year 2022. The survey which collects data from Ireland's Higher Education Institutes including eight Universities, five Technological Universities, two Institutes of Technology and two Colleges, also incorporates contributions from Teagasc, the Marine Institute and Irish Manufacturing Research (IMR).

Collaborative research projects between companies and Research Performing Organisations (RPOs) continues to be important for business. In 2022, a total of 1,179 R&D agreements were signed with companies ranging from small projects to larger scale research initiatives. There were 1,317 research projects live and ongoing between industry and RPOs by year end.

There were also 546 research consultancy agreements during 2022, projects through which the research results are transferred to companies and 75% of which involved Irish SMEs. Additionally, 506 R&D and Consultancy Agreements were signed with non-commercial entities during the year.

Read more:

KTI publishes results of its Annual Knowledge Transfer Survey - Enterprise Ireland (enterprise-ireland.com)

siliconrepublic

How to prepare for a biopharma job by Connor McKenna

1 MAY 2023

Looking for your dream job in the world of biopharma? We sought out some top tips from those already working in the industry.

In such a competitive industry, it can be hard to stand out from the crowd. SiliconRepublic.com sought out some top advice from biopharma professionals at the annual NIBRT Careers in Biopharma event.
See: **How to prepare for a biopharma job – VIDEO (siliconrepublic.com)**

APC researchers grow and map out a human gut virus

4 MAY 2023

The researchers have learned more about this prominent gut virus by growing it in a lab, in the hopes of understanding how it impacts the human microbiome.

Researchers at APC Microbiome Ireland have developed a detailed structural atlas of a prominent gut virus, to learn more about its role in shaping human health.
See: **APC researchers grow and map out a human gut virus (siliconrepublic.com)**

Irish orgs pair up to train teachers to tackle STEM skills shortage head on

8 MAY 2023

Dundalk's AMTCE will host the Engineering Technology Teachers Association as it works to train teachers to attract students to STEM careers.

The Engineering Technology Teachers Association (ETTA) is to work with the Dundalk-based Advanced Manufacturing Training Centre of Excellence (AMTCE) to increase its ability to provide training to its members so that they can teach the next generation of STEM learners.
See: **Irish orgs pair up to train teachers to tackle STEM skills shortage head on (siliconrepublic.com)**

Trinity's Prof Ed Lavelle recognised by ISI for vaccine research

9 MAY 2023

Lavelle primarily focuses on developing injectable and mucosal vaccines for infectious diseases, along with therapeutic vaccines for cancer.

Prof Ed Lavelle of Trinity College Dublin has been recognised by the Irish Society for Immunology (ISI) for his major contributions to immunology research and education.
He has received the ISI's Annual Award, which is given to "outstanding Irish immunologists" that push forward our understanding of immunology and health improvement.
See: **Trinity's Prof Ed Lavelle recognised by ISI for vaccine research (siliconrepublic.com)**

'Our test will save lives,' says director of UCD's Institute for Discovery

10 MAY 2023

Whether championing the safety of mothers and babies or campaigning for gender equality in the sciences, UCD's Prof Patricia Maguire is a firm believer that 'information is power'.

Every year 76,000 women and 500,000 babies die because of preeclampsia. Another 5m babies are born prematurely because of the condition.
See: **'Our test will save lives,' says director of UCD's Institute for Discovery (siliconrepublic.com)**

Galway scientists to lead Horizon Europe project on biodegradable medical implants

18 MAY 2023

The Biomend project aims to improve the usability of biodegradable materials for implants and will provide training for up to 15 PhD researchers.

Scientists at the University of Galway are to lead a €4.17m European research project that aims to develop biodegradable medical implants.

They will lead a consortium of 18 international research and academic partners. The Biomend consortium's project is funded by Horizon Europe's Marie Skłodowska-Curie Actions scheme.

See: **Galway scientists to lead Horizon Europe project on biodegradable medical implants (siliconrepublic.com)**

Teamwork and tech: Irish TUs bag EU funding for research addressing SDGs

23 MAY 2023

TikTok for sustainable development and ChatGPT's impact on academia are just two of the areas to be explored under the new scheme which aims to highlight collaborative research.

A series of funding grants worth a total of €650,000 has been announced today (23 May) for Ireland's technological universities.

The awards will see 131 projects in seven TUs receive funding from the EU. The N-TUTORR initiative aims to get staff and students together to work on research addressing the UN's Sustainable Development Goals (SDGs).

See: **Teamwork and tech: Irish TUs bag EU funding for research addressing SDGs (siliconrepublic.com)**

What are the current trends in Ireland's pharma sector?

2 JUN 2023

SiliconRepublic.com took a look at PDA Ireland's Visual Inspection event to learn about Ireland's pharma sector and its biggest strengths.

Ireland's pharmaceutical stakeholders gathered in Cork recently to learn the latest developments and regulatory changes in the sector.

The event was hosted by the Irish chapter of the Parenteral Drug Association (PDA), a non-profit trade group that shares science, technology and regulatory information to pharma and biopharma companies.

See: **What are the current trends in Ireland's pharma sector? (siliconrepublic.com)**

Galway researchers build 'modular' approach to cancer vaccine design

7 JUN 2023

By adding a component called a glycocluster to a vaccine prototype, a University of Galway PhD student was able to improve immune response.

A group of University of Galway scientists are among a larger, international team of researchers that has worked on a project that could pave the way for a new cancer vaccine prototype.

The research that led to the breakthrough was mostly carried out by Dr Adele Gabba while she was a PhD student at University of Galway. She was supervised by Prof Paul Murphy.

See: **Galway researchers build 'modular' approach to cancer vaccine design (siliconrepublic.com)**

Lab-made lutein yoghurt could help people avoid age-related health issues

14 JUN 2023

Naturally occurring lutein levels in fruit and veg have declined so scientists have been trying to come up with a dietary alternative for years.

A group of Irish researchers have developed a yoghurt that contains a key antioxidant that can potentially help stave off conditions like eye disease and Alzheimer's.
See: Lab-made lutein yoghurt could help people avoid age-related health issues (siliconrepublic.com)

Insight research centre worth more than €1bn to Irish economy, report claims

20 JUN 2023
Science Foundation Ireland's Insight Research Centre for Data Analytics released a report on its impact on the occasion of its tenth year in operation.
In the ten years since it was first established, the Insight Research Centre for Data Analytics has produced 1,087 research alumni. That figure is taken from a recently published report which details Insight's economic impact on Ireland over the past decade.
See: Insight research centre worth more than €1bn to Irish economy, report claims (siliconrepublic.com)

Poolbeg Pharma identifies new flu drug targets using AI

29 JUN 2023
Using an AI platform developed by CytoReason, London-headquartered Poolbeg Pharma has been analysing flu human challenge trials data since March 2022.
Poolbeg Pharma, an Irish biopharmaceutical company that focuses on infectious diseases, says it has made a "breakthrough" with AI-aided discovery of novel drug targets to treat the flu.
See: Poolbeg Pharma identifies new flu drug targets using AI (siliconrepublic.com)

Celtic Biotech: Developing novel cancer treatments from snake venom

7 AUG 2023
Brothers Paul and John Reid have assembled an international team of experts in biotech, pharma and business to help save the lives of lung cancer patients.
Not many start-ups can claim their flagship product is sourced from snake venom.
See: Celtic Biotech: Developing novel cancer treatments from snake venom (siliconrepublic.com)

DCU-led blood test study could boost breast cancer treatment

8 AUG 2023
It is hoped that this type of blood test could help inform medical professionals about the best form of treatment for breast cancer patients.
Scientists in Dublin City University (DCU) claim to have developed a preliminary blood test that can predict the effectiveness of breast cancer treatments.
See: DCU-led blood test study could boost breast cancer treatment (siliconrepublic.com)

DCU team creates compound that can damage cancer DNA

10 AUG 2023
Prof Andrew Kellett of DCU said that click chemistry, the method used for the international study, makes it 'much more efficient to find new drugs'.
A team of scientists based in Dublin City University (DCU) have created a new compound that can potentially destroy the DNA of cancer cells using a method known as "click" chemistry.
See: DCU team creates compound that can damage cancer DNA (siliconrepublic.com)

An immune protein stops ovarian cancer growth, study suggests

16 August 2023
The pre-clinical models suggest a certain protein is able to directly kill tumour cells and tell other immune cells to prevent the cancer from spreading around the body.

A new study suggests a certain protein in our immune system is able to stop the spread of ovarian cancer cells.
See: **An immune protein stops ovarian cancer growth, study suggests (siliconrepublic.com)**

Irish and US universities sign cancer research agreement

29 AUG 2023

The collaboration will see University of Galway and University of Notre Dame work together on cancer research and strengthen links between both institutions.

Researchers at University of Galway have signed a memorandum of understanding with researchers at University of Notre Dame to collaborate on cancer research.
See: **Irish and US universities sign cancer research agreement (siliconrepublic.com)**

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