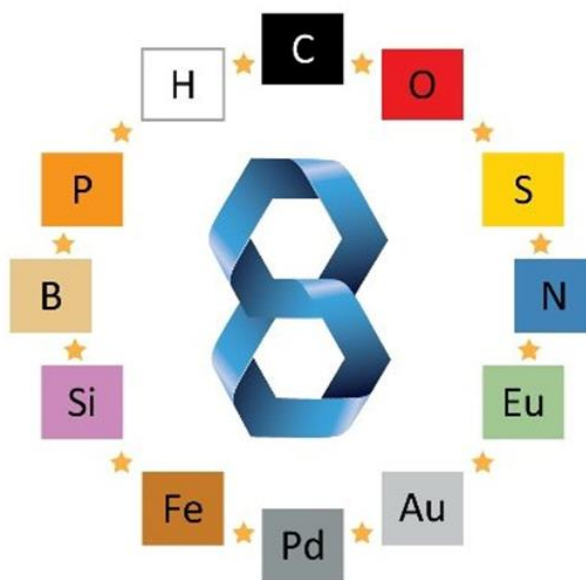
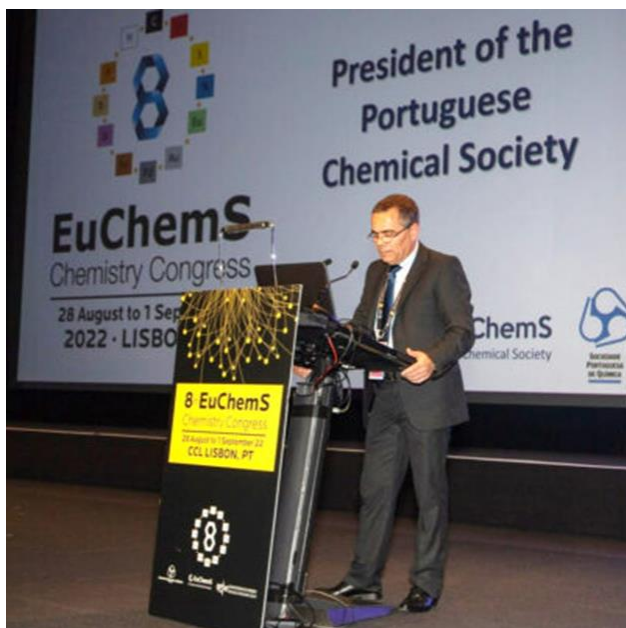


Irish Chemical News

A Journal of the Institute of Chemistry of Ireland

EuChemS Chemistry Congress 8 in Lisbon Portugal



Prof Artur Silva, President of the Portuguese Chemical Society (Sociedade Portuguesa de Química, SPQ) and Professor at the University of Aveiro, Portugal, at the Opening Ceremony (Photo © SPQ).



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

Contents:

Page

Page	
	A Message from the President 4
	Editorial 6
	The EuChemS Chemistry Congress, Dublin 7-11 July 2024 8
	Centenary Celebrations & ICI Annual Congress 2022 Announcement 13
	New Chemical Biology Group based in Dublin formed 14
	8th EuChemS Chemistry Congress ECC8, Lisbon, Portugal 22
	Angela Agostiano elected as EuChemS President-Elect 27
	EuChemS - 2022 Annual Meetings & General Assembly 28
	2022 EuChemS Professional Networks Meeting 30
	Hans Peter Lüthi elected as EuChemS Treasurer 31
	European Young Chemists' Awards Finalists 32
	EuChemS Awards open 33/34
	Chemistry in Europe Helen Pain CEO, RSC 35
	Brussels News Updates 36
	Irish Research Council 37
	Irish University & 3rd Level Chemistry News 41
	Royal Irish Academy 50
	Chemistry and related Science around the World 53
	Medicinal Chemistry, Chemical Biology & Life Sciences 109
	Climate Change, Environment, Sustainability & Related Topics 141
	Rechargeable Batteries & Technology 174
	Green Hydrogen & Fuel Cells Chemistry & Technology 197
	Solar Cell Chemistry & Technology 213
	Chemistry & Artificial Intelligence 226
	Quantum Computing & Quantum Computers 230
	Nuclear Fusion Power - Saving Angel or Optimistic Dream? 234
	Small (Modular) Nuclear Reactors & New Technology for Conventional Fission Reactors 239
	Thorium Power Reactors 244
	Hydrogen-Boron 11 Fusion Power Reactors 245
	SFI News, Updates & Reports 246
	SARS CoV-2 Virus Updates and Developments 259
	IDA Updates & Reports 291
	Enterprise Ireland Updates & Reports 315
	Siliconrepublic Briefings 336
	IMR Manufacturing & Supply Chain Award Winners 2022 343

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New President Prof Pat Guiry Address



University College Dublin
National University of Ireland

A Message from the President

Dear Fellows, Members, Graduates and Associates,

In this issue, you will find a summary of an excellent EuChemS 8th Congress which was held in August in Lisbon. We had a particular interest in this Congress as we will be organising/hosting the 9th Congress (ECC9) in Dublin 7-11 July, 2024. Well done to the 12 Irish speakers and to Professors John Cassidy and Tia Keyes who acted as Convenor and Chair for a Theme and Session, respectively. Many Council members (Celine, Steven, John, Pat and myself) attended to see at first-hand how this Congress was organised and to talk to attendees as to what worked well and what did not. I congratulate Professor Artur Silva and his team for the excellent organisation, in particular, as they had to cope with cancellation of the event since 2020 due to Covid19. It was my pleasure to represent the ICI at the Closing Ceremony to describe Dublin as the host city and to invite attendees to ECC9. The feedback throughout the Congress and afterwards was very positive and leading international scientists offered their help to ensure ECC9 would be a big success.

We have already had meetings with Noel Mitchell and Vanessa Corradini outlining what we learned from ECC8. In addition, we have had drafted the near finalised 8 themes for ECC9 and made a great effort to take on board the more than 50 responses from societies across Europe and from informal discussions at the General Assembly in Lisbon (thanks to Celine for attending this). We await final feedback to this draft from EuChemS Divisions and Working Parties and will then work to set up the Scientific Committee which will be chaired by Professor David Leigh from the University of Manchester. Theme convenors will be chosen and invitations will be sent to Plenary Lecturers as 2024 is not that far away and the diaries of eminent chemists can fill up quickly, even for 2024. Our Local Organising Committee, chaired by Professor Thorri Gunnlaugsson, will also commence their work in the coming months.

Congratulations to Dr Susan Kelleher (DCU) and Dr Robert Elmes (Maynooth University) who delivered excellent lectures at the EuChemS Division of Organic Chemistry Young Investigator Workshop in Lisbon, held after ECC8. I attended in my role as President of the EuChemS Division and this was an excellent opportunity for Susan and Robert to network with other young academics from across Europe, the USA and Canada.

Planning continues for the upcoming Centenary Congress which will be held on the 17th November in the Royal Irish Academy on Dawson Street. Professor Tadhg Begley, Texas A&M University, will deliver his

2021 Boyle-Higgins Medal Award Lecture and it is planned that the 2022 Boyle-Higgins Medal and Eva Philbin Public Lecture awardees will also present their lectures at this event. The process for their selection is ongoing as they closed last Friday, October 7th. We plan to announce the award winners for 2022 after our next Council meeting on 21 October. The full list of speakers for 17 November will also be completed once we know these award winners.

Congratulations to Professor Isabel Rozas and Dr Marina Rubini on the successful application of their Medicinal and Biological Chemistry Division to become a member of the European Federation of Medicinal Chemistry and Chemical Biology. This sets the precedent for the formation of similar Divisions within the ICI to cover the breadth of Chemistry in Ireland. I would hope that we can set up Divisions in Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Analytical Chemistry, Industrial Chemistry, amongst others, in the coming year. These Divisions can then help the ICI with a renewed focus and to increase the ICI membership. Remember that the more members we have, the more we can do for that membership.

Many thanks to the ICI Young Chemists' Network (YCN) who continue to work hard to provide support to the younger members of our community. Colm McKeever, Maynooth University, is the ICI YCN chair and the YCN is a very strong component of EuChemS and they also had a meeting at the end of the ECC8 in Lisbon. There will also be a Network meeting for the YCNs across Europe at ECC9 in Dublin.

I wish to again thank our Editor, Patrick Hobbs, who brings our community up to speed on national and international topics that are of most interest to our community. This is a significant undertaking and is much appreciated. This issue covers a broad range of topics from the ECC8 in Lisbon, to the 1st Chemical Biology Ireland conference organised by Drs Marina Rubini, Joanna McGouran and Eoin Scanlan, to new appointments in EuChemS, to sustainable chemistry and beyond! 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 MRIA

President, Institute of Chemistry of Ireland

14th October, 2022



Editorial

Live events are back and we look forward to having our Centenary Celebrations and Congress and the ICI Congress on 17th November, hosted at the Royal Irish Academy, Dawson Street, Dublin right in the City Centre and easily reached by public Transport, Luas, Dart and Bus and with paid parking nearby. The RIA is an impressive venue and was much admired by delegates attending the EuChemS General Assembly hosted by the Institute in 2012.

The long awaited European Chemical Society Chemistry Congress (ECC8) which was postponed in 2020 was held in Lisbon, Portugal. It was an excellent event with a number of great speakers on diverse topics, especially green chemistry and its contribution to alleviating the climate crisis. This Issue will guide you to links to Abstracts, Conference Program Awards and photos etc. The EuChemS General Assembly took place in Lisbon two days before the Congress and is also covered.

Twelve Irish Speakers were invited to speak across a number of topics as well as Convenors and Chairs appointed such as Prof John Cassidy from TU Dublin who convened Theme G, Spectroscopic & Analytical Tools/Advanced Physical Chemistry and Prof Tia Keyes DCU who chaired Applied Physical Chemistry. The list of Irish Invited Speakers is included in the following pages.

At the closing ceremony our President Prof Pat Guiry did an excellent presentation and issued an invitation to delegates to come to Dublin for the 2024 ECC9 Congress at our Convention Centre. This was well received. In talking to delegates throughout the week and at the Congress dinner there was very positive feedback in regard to supporting the Dublin Congress in 2024.

I would like to congratulate Prof Artur Silva of the Portuguese Chemical Society and the Scientific Committee on the sheer scope of topics covered during the week. It was a major undertaking and a great success.

During the last few months reviewing the daily feeds on the special topics I cannot but be impressed by the sheer efforts, innovation, imagination and progress made by scientists, chemists and engineers across the world. This is coming from academia, industry and governments across the globe. In dollar terms this amounts to many billions per year.

Our new Medicinal Chemistry and Chemical Biology Division is up and running. Both special interest groups have made a joint successful application to The European Federation for Medicinal Chemistry and Chemical Biology (EFMC) for membership. A report is presented within this Issue.

I have tried to capture a broad spectrum of articles and opinions from academic publications, technical publications, trade magazines, science journalists' articles and newspapers. Many are free to read but some intrusive advertising does occur, as these publications have to earn revenue or fail as a business. In the Climate Change, Environment and Sustainability section there is probably more diversity than other sections. This topic is large and a wide ranging body of work but hopefully will you find the items in this section interesting.

It can be hard to appreciate the sheer scale of environmental remediation projects for example marine wind mills. Recently while visiting Killybegs I saw sets of stacked wind turbine rotor blades in the Harbour awaiting transport by road to a wind farm in Mayo. The diameter of the base was about four

meters with ladders attached which made them look like accommodation units. To facilitate the large trucks needed to transport these blades, road junctions have to be modified and footpaths protected. This technology also poses problems for Irish ports, as the only port deep enough on the island to handle some of the huge structures is Belfast Harbour. Another example of scale is a Netherlands company who have produced a crane which can lift 3000 tonnes to a height of 240 meters.

Battery chemistry technology is really advancing very rapidly with several chemistries being tested and range has been extended substantially. Fuel Cell technology lags somewhat behind battery development while there are plenty of innovations in catalysis for green hydrogen. Hydrogen is attracting debate as regards use in private cars and domestic heating. It seems the debate is favouring hydrogen for heavy transport in ships, planes, trucks and buses but fast charge solid state batteries with long range seem best for private cars. Some airlines have placed orders for hydrogen power planes over the next few years and steel mills are likely to make the conversion to hydrogen.

Artificial Intelligence, Supercomputers and Quantum Computing will soon radically transform society, medicine, drug discovery and chemistry. This has already started and in challenges to quantum computing a quantum computer can calculate in 36 seconds what a conventional computer would take 9000 years to perform. This will start to impact chemical research in the coming years. You can find coverage of these topics in the appropriate sections.

The one topic section expected to reduce was the SARS-CoV-2 and Covid-19 topic. During the last four months the number of papers and reports has increased substantially instead of tailing off so this section has expanded. New variants emerged and are emerging but hopefully with several bivalent vaccine becoming available imminently we will not have another winter surge like last year with severe illness and deaths but the pandemic has not gone away.

Another exciting topic to include is the Chemistry Nobel Prize winning CRISPR technology. The 2020 Nobel Prize for chemistry was awarded to Emmanuelle Charpentier and Jennifer Doudna for their work on CRISPR-Cas9 – a method to edit DNA.

This research which is already showing promise will revolutionise medicine and health care in the coming years. There are an extensive and increasing number of publications in the literature and I will introduce this new topic in the next Issue.

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

editor@instituteofchemistry.org

[Institute of Chemistry of Ireland \(chemistryireland.org\)](http://chemistryireland.org)

Patrick Hobbs MSc, FICI, CChem, CSci, MRSC.

Editor

Irish Chemical News

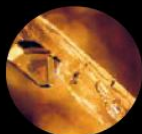
14th October 2022

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



9th EuChemS

CHEMISTRY CONGRESS
Dublin, Ireland 7–11 July 2024



Save the Date!

For regular e-updates
about the 9th EuChemS
2024 please sign-up at
www.EUCHEMS2024.org



 **EuChemS**
European Chemical Society





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



WHERE SCIENCE MEETS BUSINESS

SOCIETY OF CHEMICAL INDUSTRY

**SCIENCE
WEEK**

#scienceweek

13-20 Nov 2022

Supported by Science Foundation Ireland

BOOK
ONLINE
TO ENTER!
bit.ly/18thquiz

18th ANNUAL SCIENCE WEEK TABLE QUIZ

The Annual Science Week Table Quiz, organised by
SCI®'s All Ireland Group, returns for its 18th year.

Science Week Ireland is a national science festival dedicated to science engagement. SCI® has been hosting a quiz as part of this since 2003.

Science is an important part of a shared better future – helping us to understand our world, inspiring new opportunities, and providing potential solutions. From the infinite variety of our amazing planet and the adaptability of nature, to our ability to face the unexpected, the possibilities are endless. This year's Science Week theme is "Infinite Possibilities" so the quiz will feature a round on exploring the infinite possibilities of science, as well as the regularly featured rounds.

We encourage all to get involved and come along to the 18th Annual Science Week Table Quiz for a fun and engaging evening to celebrate all things science!

Register your team of up to 5 members now!

[BIT.LY/18THQUIZ](https://bit.ly/18thquiz)

TIME

**20:00 Wednesday
16 November 2022**

VENUE

**Doyles Pub, 9 College St,
Dublin 2, D02 WN62**

PRIZES

€200, €100 and €50

COST

€20 per table booking

E: conferences@soci.org T: +44 (0)20 7598 1561
www.soci.org





Science Week 2022

Infinite Possibilities

November 13th - 20th

Science Week 2022 - Infinite Possibilities

As a society, we have shown our resilience and ability to withstand adversity, bouncing back from difficult challenges we face in our daily lives and as a collective. Science is an important part of a shared better future – helping us to understand our world, inspiring new opportunities, and providing potential solutions. From the infinite variety of our amazing planet and the adaptability of nature, to our ability to face the unexpected, the possibilities are endless. We have many choices to make and more challenges to face, and we are all part of the conversation about the role that science can play. For Science Week 2022, we are asking people to explore the infinite possibilities of science. [Take a look at some highlights from last year's Science Week:](#)



<https://youtu.be/y3j70AjRnzY>

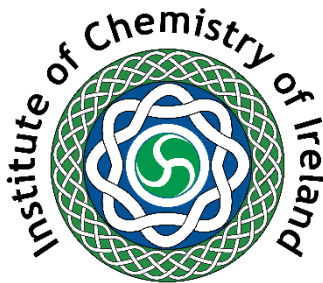
About Science Week

Science Week is a week-long event in Ireland each November, celebrating science in our everyday lives. Science Week includes a wide variety of events involving industry, colleges, schools, libraries, teachers, researchers and students throughout Ireland. Science Week has a number of regional festivals offering a range of opportunities for the public to engage with STEM in across Ireland.

Contact us by email scienceweek@sfi.ie and subscribe to the [Science Week newsletter](#).

Follow **#ScienceWeek** online and keep up to date on our social channels:

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The Institute of Chemistry of Ireland Awards

The ICI Boyle Higgins Gold Medal and Lecture Award The ICI Annual Award for Chemistry (Eva Philbin Public Lecture Series) The ICI Postgraduate Award

The Boyle Higgins Gold Medal and Lecture Award

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 recognised 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 two independent referees, who are recognised experts in the category and who are not nominators.

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

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, who may be an Irish or international chemist of repute**, 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, 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.

The ICI Postgraduate Award

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.

Nomination Process: The nominator, who must be the student's PhD supervisor, shall send one electronic copy of their nomination by email to the President of the Institute, which will include a cover letter providing a brief resume of the reasons for the nomination, together with a CV (maximum 2 pages) of the nominee.

For these awards and others see ICI website <https://www.chemistryireland.org/awards-events>
Nominations to be sent to the ICI President at: president@instituteofchemistry.org

ICI Centenary 1922-2022



Centenary Celebrations & ICI Annual Congress 2022

Save the Date

November 17

Venue Royal Irish Academy

Dawson Street, Dublin

More details will follow by email and check our website for updates nearer to the date:

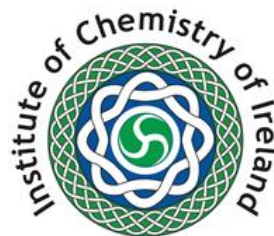
[Institute of Chemistry of Ireland \(chemistryireland.org\)](http://chemistryireland.org)

<https://www.chemistryireland.org>



New Division: Medicinal Chemistry & Chemical Biology Division

Medicinal & Biological Chemistry Division



ABOUT US

The establishment of the division of Medicinal and Biological Chemistry within the ICI represents a fundamental step in our disciplines and will allow us a stronger support of medicinal and biological chemistry in Ireland (north and south). This will be strongly enhanced by becoming members of the **European Federation of Medicinal Chemistry and Chemical Biology**.

The aim of our Division of Medicinal and Biological Chemistry is to promote the fields of Medicinal and Biological Chemistry among academic and industry researchers in Ireland by encouraging collaborations within the island and to enhance the innovative potential of the Irish-based research groups.

Considering the large number of pharmaceutical companies with operative sites in Ireland (north and south), the number of researchers working in both fields in Irish Universities as well as the successful degrees in Medicinal/Biological Chemistry being developed by several of our universities, one of our most important objectives is the organization of biannual meetings to bring high level international speakers and showcase the research carried out in Ireland.

Additionally, we aim at creating networking opportunities among researchers (both from academy and industry) based in Ireland. These networking events are meant to foster the establishment of new collaborations, to better exploit the existing research potential and to evaluate dormant synergies. Furthermore, we want to increase the visibility of Irish Medicinal Chemistry and Chemical Biology Research internationally, in order to foster new ideas and collaborations, and thereby create the foundation

for collaborative projects to apply for exchequer funding from the European Union and international funding sources.

COMMITTEE

Up until joining the ICI as a Division, the Medicinal and Biological Chemistry groups have functioned as networks consisting in researchers from different universities in Ireland. Now a committee should be constituted and that will be pursued from September 2022 and the corresponding members (i.e. chairperson, vice-chair, treasurer, and 4-6 representatives from universities and pharmaceutical industry in Ireland) elected.

EVENTS

Subsequently Professor Isabel Rozas presented the case for Medicinal and Biological Chemistry Division of the Institute of Chemistry becoming an adhering organisation of the European Federation for Medicinal chemistry and Chemical biology at the EFMC – ISMC International Symposium on Medicinal Chemistry held in Nice, France on September 4-8 2022. Professor Rozas had her joint application with Dr Marina Rubini accepted and acknowledged in their latest newsletter MedChemBioWatch:

Article provided by Prof Isabel Rozas (TCD)

EFMC WELCOMES A NEW NATIONAL ADHERING ORGANISATION

In our aim to showcase the Medicinal Chemistry/Chemical Biology continuum, and to represent the European scientific community at best, the EFMC is delighted to welcome the **Medicinal and Biological Chemistry Division of the Institute of Chemistry of Ireland** as its 30th national adhering organisation.

We warmly welcome them into our federation, and we express our sincere thanks to all those who worked together in making this fruitful collaboration possible. We look forward to working together in our common objective to advance the science of medicinal chemistry & chemical biology in Europe and around the World.



<https://www.efmc-ismc.org>



About EFMC

The European Federation for Medicinal chemistry and Chemical Biology (EFMC) is an independent association founded in December 1969 that represents 29 scientific organisations from 25 European countries, and more than 9000 scientists. Its objective is to advance the science of medicinal chemistry & chemical biology by promoting cooperation and encouraging strong links between the national adhering organisations in order to deepen contacts and exchanges between medicinal chemists & chemical biologists in Europe and around the World. EFMC fulfils this objective by organizing symposia and short courses, by sponsoring meetings and medicinal chemistry schools, by publishing on relevant topics and by conferring awards and prizes.

Its most important organisation is the biennial International Symposium on Medicinal Chemistry (EFMC-ISMIC). These symposia, with an average attendance of 1,200 delegates, are highly international with a broad range of speakers and attendees from the pharmaceutical industry and academia. Next to the EFMC-ISMIC, EFMC is involved in the organisation of the EFMC|ACSMEDI Medicinal Chemistry Frontiers and the International Symposium on Advances in Synthetic and Medicinal Chemistry (EFMC-ASMC). EFMC also organises intensive short courses on specific topics in medicinal chemistry. The Young Medicinal Chemists' Symposium (YMCS) on its side, has become an annual concentration of young talents.

An important part of the EFMC activities is sponsorship of national scientific meetings and medicinal chemistry/chemical biology schools. EFMC also awards travel grants for younger scientists to attend EFMC symposia and schools.

EFMC also acknowledges the excellence of medicinal chemists' work, by conferring three major awards: the Nauta Pharmacochemistry Award for Medicinal Chemistry and Chemical Biology, the UCB-Ehrlich Award for Excellence in Medicinal Chemistry and the Prous Institute-Overton and Meyer Award for New Technologies in Drug Discovery, which are given every two years for outstanding achievements in the field of Medicinal Chemistry. From 2010 on, EFMC established two new prizes to acknowledge the scientific accomplishments of young medicinal chemists, both in industry and academia.

[The European Federation for Medicinal Chemistry \(EFMC\)](#)

EFMC publishes five publications:

As of April 5, 2022, the European Federation for Medicinal chemistry and Chemical biology is proud to have entered a partnership agreement with ChemMedChem and ChemBioChem, to become official EFMC journals.

ChemMedChem

Bringing chemistry, biology, and drug discovery together fosters innovation and collaboration and accelerates science. ChemMedChem publishes high-impact articles showcasing the breadth of international research in medicinal chemistry, from small pharmacologically active molecules to new modalities including nanomedicine and biologics. Our thorough editorial practices enable us to rapidly publish authoritative research. We support the community to inspire the extended drug discovery community.

[ChemMedChem](#)

ChemBioChem

Bridging the gap between scientific specialisms creates a unique community that recognizes and celebrates connected science. ChemBioChem showcases vital ground-breaking science combining chemistry and biology across the world. Our thorough editorial practices support us in disseminating authoritative studies in chemical biology, bioorganic chemistry, biochemistry, bioinorganic chemistry, synthetic biology, biocatalysis, bionanotechnology, and biomaterials. We support collaborations throughout connected science.

ChemBioChem

Chemistry Europe

Founded in 1995, Chemistry Europe is an association of 16 chemical societies from 15 European countries, representing over 75,000 chemists. It publishes a family of high-quality scholarly chemistry journals, covering a very broad range of disciplines. Wiley-VCH is their publisher.

The mission of Chemistry Europe is to evaluate, publish, disseminate, and amplify the scientific excellence of chemistry researchers from around the globe in high-quality publications. It supports its members at every stage of their careers as they strive to solve the challenges that impact humankind. In all its work, Chemistry Europe values integrity, openness, diversity, cooperation, and freedom of thought. <https://chemistry-europe.onlinelibrary.wiley.com>

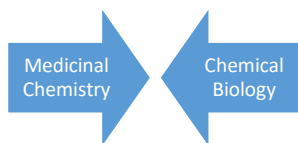
MedChemBioWatch is the newsletter of EFMC, launched in 2008. Since January 2015, MedChemWatch continued serving our community in a different format, more tailored on the growing needs of rapid and short communication. The newsletter is delivered monthly, in a shorter format, with essential information on the activity of the EC/EFMC, news from the National Adhering Organisations, announcement of meetings and schools.

As of June 2021, the newsletter changed its name to **MedChemBioWatch**, to support our aim to increase the visibility of chemical biology within EFMC and to make all researchers feel fully included and well represented.

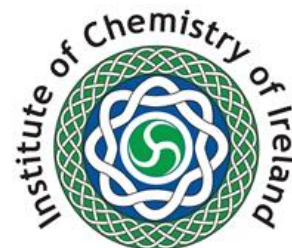
MedChemBioWatch

The **EFMC Yearbook** "Medicinal Chemistry in Europe" is published yearly by EFMC since 2005 to give an overview of medicinal chemistry in Europe in general.

EFMC Yearbook



Medicinal & Biological Chemistry Division



1st Chemical Biology Ireland Conference

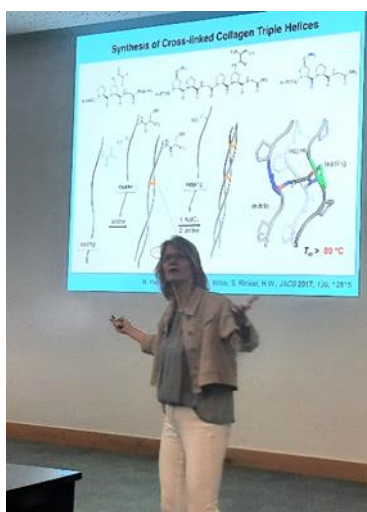
The 1st Chemical Biology Ireland conference was held in University College Dublin (UCD) on 8-9 August 2022.

In 2020, **Marina Rubini** (UCD) contacted **Joanna McGouran** and **Eoin Scanlan** (Trinity College Dublin) with the goal to organise a conference with the aim to provide an international platform for knowledge exchange and networking for Irish scientists working in the emerging field of Chemical Biology and related disciplines at the interface between bioorganic chemistry, medicinal chemistry, and protein/peptide chemistry. Due to the pandemic, the conference had to be postponed twice, but it was worth waiting. In the end, 113 participants from 13 countries all over the world attended the event and even the weather was on our side in sunny Dublin!



Group photo of the congress attendees

The scientific programme started with a brilliant opening lecture given by **Helma Wennemers** (ETH) on “Synthetic Collagen Peptides – From Structure to Function”. In particular, she showcased the design and synthesis of chemical probes for the simultaneous monitoring and targeting of lysyl oxidase-mediated collagen cross-linking.

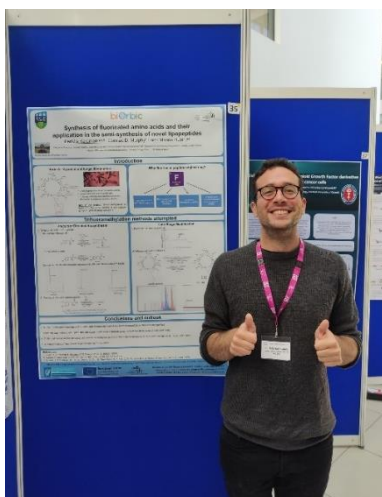


Further, **Joanna McGouran** (Trinity College Dublin) presented the development and use of activity-based probes to study endogenous deubiquitinating enzymes; **Nediljko Budisa** (University of Manitoba, Canada), gave insight in recent advances in genetic code engineering of *Escherichia coli* for endowing proteins and cells with new and unusual functions; **Kathrin Lang** (ETH) highlighted the use of artificial designer amino acids for investigation of protein-protein interactions, while **Eddie Myers** (NUI Galway) presented novel thermal and photochemical transformation of cysteine derivatives for the development of new linkages for peptide biomaterials. The scientific programme on the first day closed with the plenary lecture of **Ron Raines** (MIT) on “Lessons learnt from Collagen”. In his inspiring lecture, he explained how stereoelectronic effects can be exploited for the creation of synthetic collagens for applications in biotechnology and biomedicine.

At the end of the scientific session on the first day, the Conference Get Together next to the riverbank of the Dodder provided the ideal environment to socialise and exchange ideas in an informal and friendly atmosphere.

The programme continued the second day with **Andreas Marx** (University of Konstanz) who reported on synthetic tools to study post-translational modifications such as ubiquitination and ADP-ribosylation. Further, **Stuart Conway** (University of Oxford) gave new insight into probing the role of bromodomains in the disease-causing parasitic worms *Schistosoma Mansoni*; **Valentin Wittmann** (University of Konstanz) showcased the use of chemoselective ligation reactions in metabolic glycoengineering and in the preparation of glycoconjugates; **Stefan Oscarson** (University College Dublin) reported on chemical biology approaches towards the study of the cell wall of the fungi *Cryptococcus neoformans* and the development of fungal glycoconjugate vaccines, and **Stephen Cochrane** (Queen's University Belfast) reported on synthetic non-ribosomal peptides that selectively target Gram-negative bacteria. The closing lecture was given by **Christian Hackenberger** (FMP Berlin) on “Next-generation bioconjugates for intra- and extracellular targeting”. His lecture focused on the chemical modification of functional proteins for pharmaceutical and medicinal applications.

The scientific programme included 12 invited lectures, 7 selected oral presentations, and engaging poster sessions (55 posters).



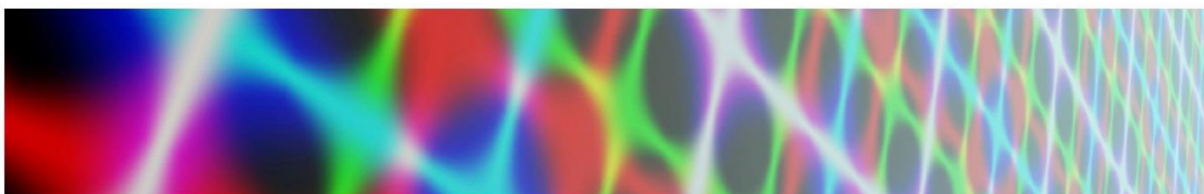
Poster session

Of course, this event wouldn't have been possible without the support of our generous sponsors: the Royal Society of Chemistry, University College Dublin, Biorbic and SSPC, two research centres of Science

Foundation Ireland, the European Peptide Society, Nature Communications for one of the poster prizes, the Irish Research Council, and our industry sponsors APC, Lumicks, and Iris Biotech. This event has been sponsored also by the European Federation of Medicinal Chemistry and Chemical Biology (EFMC). At this point, we are also proud to mention that the application submitted by Prof Isabel Rozas (TCD), Prof Paul Murphy (NUI Galway), and Prof Marina Rubini (UCD) for the ICI Division “Medicinal and Biological Chemistry” to join the EFMC has been successful!

Given the positive and enthusiastic feedback from the participants we plan to make “Chemical Biology Ireland” a biannual event. See you in 2024!

Article provided by Dr Marina Rubini (UCD)



Application of Carbohydrates: Medicinal Chemistry, Materials and Biotechnology

21 November 2022 12:00 - 22 November 2022 16:00, Belfast, United Kingdom 📅

The conference will cover topics across the glycosciences, with a particular focus on medicinal chemistry, biotechnology, and materials science. It will feature an excellent line up of speakers from the UK, Ireland and beyond, including 2 Dextra Award lectures from Dr Tracey Gloster 2019 and Prof Gavin Miller 2021, as well as ample networking opportunities, including a dedicated Early Career Researcher session.

If you wish to take part in the poster session or be considered for an ECR oral presentation, please send an abstract to a.ni.cheallaigh@keele.ac.uk by Friday the 14th of October (abstract: Calibri body size 11, 300 character word limit and images limited to one figure). A number of ECR travel bursaries of up to £250 have been kindly provided by our sponsors. If you wish to be considered for these travel bursaries please indicate this when submitting your abstract.

Registration: <https://www.eventbrite.com/e/rsc-and-ici-application-of-carbohydrates-medicinal-chemistry-and-materials-tickets-408710272427>

Event Schedule

MONDAY 21 NOV

12:00 Arrival & registration

12:30 Welcome

12:45-13:30 Dr Tracey Gloster, University of St Andrews

13:30-14:00 Prof Ulf Nilsson, Lund University

14:00-14:30 Prof Alexander Titz, Saarland University

14:30-14:45 Coffee

14:45-15:30 Prof Sophia Karagiannis, King's College London

15:30-16:00 Lecture 3

16:00-17:00 Poster Session with Sponsorship Presentations

19:30 Conference dinner and entertainment

TUESDAY 22 NOV

9.15 Coffee

9:45-10:30 Prof Gavin Miller, Keele University

10:30-11:00 Prof Paul Murphy (University of Galway)

11:00-11:30 Coffee & poster session

11:30-12:00 Dr Joanna Mc Gouran (Trinity College Dublin)

12:00 - 12.30 Prof Jeroen Codee (Leiden University)

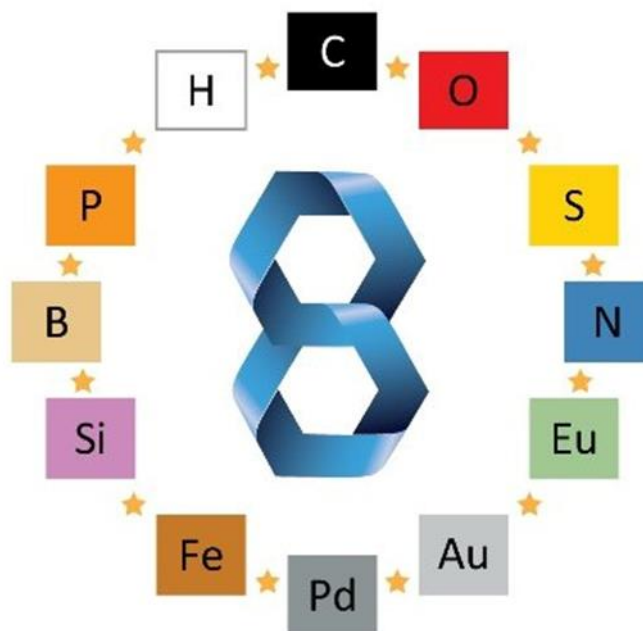
12:30-13:30 Lunch

13:30 Poster Prizes

13.45-15.45 ECR afternoon (6 x 20 minute Presentations)

15.45-16.00 Closing Remarks

This event and the awards have been kindly sponsored by RSC Advances, RSC Medicinal Chemistry, Organic and Biomolecular Chemistry, Dextra Laboratories, Heparin Building Blocks and Enginzyme.



8th EuChemS Chemistry Congress ECC8, Lisbon, Portugal

The Portuguese Chemical Society (SPQ), with the support of the Portuguese Electrochemical Society (SPE) held the 8thEuChemS Chemistry Congress (ECC8 in Lisbon, Portugal, from August 28 to September 1, 2022.

The 8 EuCheMS Chemistry Congress built around the unifying theme of “**Chemistry the Central Science**” focusing on the central role of chemistry at the interfaces with biology, material and environmental sciences, both for the progress of humankind and for the solution of fundamental problems of modern societies.

The scientific program led by world class experts focused around seven main scientific topics:

- Advances in Synthetic Organic Methodologies
- Metal Containing Compounds and Solids: Properties and Applications
- Chemistry meets Biology
- Colloids and Materials
- Biomaterials and Medicinal Chemistry
- Catalysis
- Spectroscopic and Analytical Tools / Advanced Physical Chemistry

A further three sessions devoted to topics of particular interest to chemists from different areas:

- Chemistry and Society
- Functional Materials
- Food Chemistry

A further series of seminars organised by the EuChemS European Young Chemists' Network of EuChemS (ETCN) ran each day provided an overview of topics traditionally beyond the classical chemistry areas. The three general themes were:

Molecules in Motion
Energy, Environment and Sustainability
Imaging

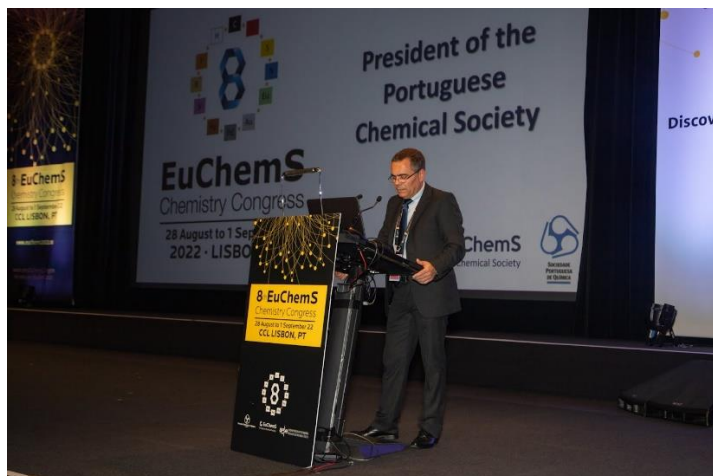
ECC8 provided the chance for delegates to hear directly from some of the most celebrated world class speakers presenting state of the art advances in chemical sciences and allow discussion with the wider chemistry community.

The Plenary Speakers

- **Hanadi Sleiman**, McGill University, Canada
Chemistry and Biology
- **Cristina Nevado**, University of Zurich, Switzerland
Organic Synthesis/Medicinal Chemistry
- **João Rocha**, University of Aveiro, Portugal
Materials and Solids
- **Lutz Ackermann**, University of Gottingen, Germany
Catalysis
- **Nicola Armaroli**, National Research Council, Bologna, Italy
Energy and Sustainability
- **Joanna Aizenberg**, Harvard University, USA
Materials
- **Takuzo Aida**, The University of Tokyo, Japan
Polymer and Supramolecular Chemistry
- **Dame Carol Robinson**, University of Oxford, UK
EuChemS Gold Medal 2022
- **Michele Parrinello**, Eidgenössische Technische Hochschule Zürich (ETH), Switzerland
EuChemS Gold Medal 2020
- **Paul Anastas**, Yale University, USA
August Wilhelm von Hofmann Denkmünze 2022
- **John C. Warner**, Warner Babcock Institute for Green Chemistry, USA
August Wilhelm von Hofmann Denkmünze 2022

Opening Ceremony

The Congress was opened by the President of the Portuguese Chemical Society, Prof Arthur Silva and Floris Rutjes, President of the European Chemical Society.

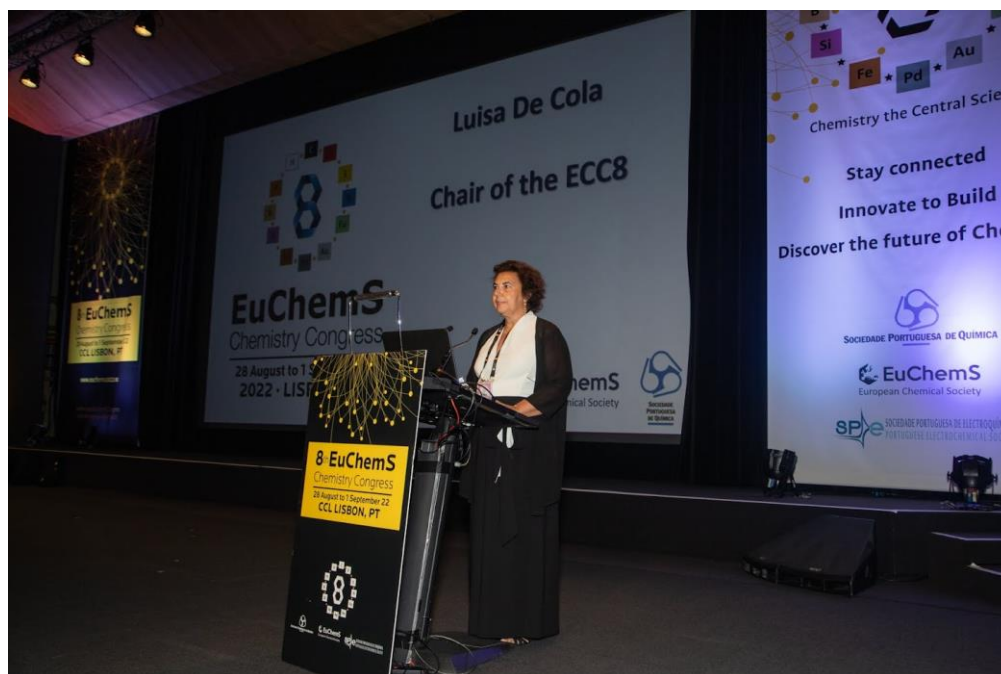


Prof Arthur Silva



Prof Floris Rutjes

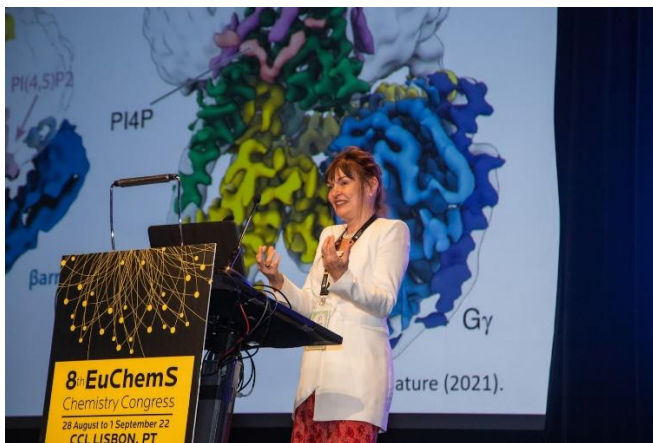
Prof Luisa de Cola, Head of the Scientific Committee and Professor at the University of Milan, Italy, has created the logo of the conference, which is reminiscent of the European flag.



During the Opening Ceremony - The European Chemistry Gold Medal Awardees from 2020 and 2022, Michele Parrinello, and Dame Carol Robinson respectively, received their awards at the opening ceremony of the congress, on 28 August.



Prof Michele Parrinello



Dame Carol Robinson RSC

Following the opening ceremony, the exhibition hall opened, where participants could visit the EuChemS booth to learn more about our activities.



Dr Nineta Hrastelj Secretary-General, Prof Pillar Goya Vice-President, Prof Floris Rutjers President, Prof Angela Agostiano, President-Elect Prof Eckart Ruehl Treasurer



ChemistryViews report on the congress:

[Discussing Chemistry with Friends in Europe - ChemistryViews](#)

Poster Code	Speaker Name	University
ERC3	Larisa Florea	Trinity College Dublin
OC.B4.4	Bilal Javed	School of Food Science and Environmental Health, Technological University Dublin
IL.B5.3	Michael Zaworotko	Depart. of Chemical Sciences and Bernal Institute, University of Limerick
IL.C1.5	Marina Rubini	O' Brien Centre for Science, Belfield, University College Dublin
IL.C2.1	Donal O'Shea	Royal College of Surgeons in Ireland (RCSI)
OC.C3.11	R. C. Curley	Dublin City University, School of Chemical Science
OC.D5.2	Gerard McGlacken	University College Cork, Cork
OC.G1.3	Shane Grant	Nanoscale Biophotonics Laboratory, National University of Ireland Galway
IL.G4.2	Barbara Kasprzyk-Hordern	Department of Chemistry, University of Bath, UK and Northern Ireland
IL.G4.3	Tia E. Keyes	School of Chemical Sciences, National Centre for Sensor Research, Dublin City University
IL.G6.2	Alan G. Ryder	School of Chemistry, National University of Ireland, Galway
OC.OTS1.2.3	Mathias O. Senge	School of Chemistry, Trinity Biomedical Sciences Institute, Trinity College Dublin

The Full Program for EuChemS22 has been published:

[FULL.pdf \(euchems2022.eu\)](#)

Book Programme:

[8ECC_ProgrammeHighlights2.pdf \(euchems2022.eu\)](#)

Poster Communications

[PosterCommunications.pdf \(euchems2022.eu\)](#)

Invited Lectures & Oral Presentations

[\(Microsoft Word - Comunica\347\365es IL e OC_COMPLETADO_2.docx\) \(euchems2022.eu\)](#)

Book of Abstracts (Very large document 1072 pages)

[abstracts.pdf \(euchems2022.eu\)](#)

Congress Website

[EuChemS2022 - Chemistry Congress](#)

Angela Agostiano elected as EuChemS President-Elect

Sep 15, 2022



Congratulations to Angela Agostiano, President-Elect of EuChemS.

Angela Agostiano was elected by the representatives of EuChemS Member Societies and Supporting Members on 26 August during the [General Assembly](#) in Lisbon, Portugal.

Angela Agostiano is currently Full Professor at the University of Bari Aldo Moro, Italy. Her area of expertise is Chemical-Physical Processes. She was the President of the [Italian Chemical Society \(SCI\)](#) from 2017 until 2019.

Angela held a presentation at the General Assembly, in which she emphasized the importance of scientific and educational collaboration across Europe.

She will start as EuChemS President in January 2024 and in the meantime will serve as President-Elect as of January 2023.

2022 Annual Meetings & General Assembly – EuChemS

27 August 2022

The 2022 EuChemS General Assembly meeting took place in Lisbon. The closed session of the GA, for members with voting rights was held on Friday, 26 August 2022 afternoon. The open session was held on Saturday, 27 August in the morning.

The meeting was chaired by Floris Rutjes, EuChemS President. The highlights of the European Chemical Society in the last twelve months were presented by Floris Rutjes, Nineta Hrastelj, Péter Szalay, Eckart Rühl and Maximillian Menche. Presentations included, amongst others, updates on what is new at EuChemS, policy work, projects, communications, financial matters, Professional Networks and EYCN updates. The presentations will be available for download in the near future.

During the meeting, the new President-Elect, Angela Agostiano and the new Treasurer, Hans Peter Lüthi were elected. EuChemS welcomes them in their new roles, starting in January 2023! In addition, numerous topics, ranging from awards to strategic subjects were considered in a lively discussion.

Participants thanked for the service of Pilar Goya, current Vice-President and Eckhart Rühl, current Treasurer, whose mandates are approaching their end.

EuChemS warmly thanks all representatives who participated in the 2022 General Assembly. This meeting was carefully organised by the EuChemS Secretariat led by Nineta Hrastelj, Secretary General, and was made a success thanks to the excellent collaboration of the representatives from the EuChemS Member Societies and Supporting Members before and during the meeting.

On the next morning, 27 August, an open discussion on numerous topics was held, ranging from awards to strategic subjects. On the day's afternoon, the representatives of Professional Networks considered numerous matters related to their operations. In addition, the outlines for the ECC9 were announced, and progress updates were made on the next Congress by Celine Marmion.

Presentations GA 2022

- **EuChemS President Presentation – *Floris Rutjes***
- **EuChemS Secretariat Presentation – *Nineta Hrastelj***
- **EuChemS Professional Networks – *Péter Szalay***
- **EuChemS Finances – *Eckart Rühl***
- **EYCN – *Maximillian Menche***



Delegates including Prof Celine Marmion RCSI and Immediate Past President of ICI (to right of door)



General Assembly and Professional Network meetings of EuChemS, that took place on 26 and 27 August

Presentations GA 2022

- **EuChemS President Presentation – *Floris Rutjes***
- **EuChemS Secretariat Presentation – *Nineta Hrastelj***
- **EuChemS Professional Networks – *Péter Szalay***
- **EuChemS Finances – *Eckart Rühl***
- **EYCN – *Maximillian Menche***

2022 EuChemS Professional Networks Meeting

The 2022 annual meeting of the EuChemS Professional Networks (PNs) was held in Lisbon, on Saturday, 27 August 2022.

The PNs meeting, chaired by Floris Rutjes, EuChemS President, was attended by the representatives of professional networks. Various topics were covered during this meeting, such as presenting follow-up actions from last year's meeting, recent EuChemS highlights, and strategic future orientations. Representatives of each PN introduced their networks to those who were present using Péter Szalay's presentation prepared for the GA. Celine Marmion discussed the progress of the ECC9, to be held in Dublin in 2024.

EuChemS warmly thanks all attendees who participated in the 2022 annual PNs meeting, prepared by the EuChemS Secretariat, and greatly appreciates the active participation and collaboration of all PNs during the meeting and throughout the year.



Our representative Prof Celine Marmion RCSI represented ICI at the meeting (in blue). EuChemS, Treasurer Prof Ekhart Ruhl is pictured in left foreground.

Hans Peter Lüthi elected as EuChemS Treasurer



Sep 15, 2022

Congratulations to Hans Peter Lüthi, newly elected Treasurer of EuChemS.


Hans Peter Lüthi was elected as the next Treasurer by the representatives of EuChemS Member Societies and Supporting Members on 26 August during the [General Assembly](#) in Lisbon, Portugal.


Hans Peter Lüthi is senior staff scientist and lecturer at the ETH Zurich, Switzerland. He served as treasurer for the Swiss Chemical Society and for the EuChemS Division of Computational and Theoretical Chemistry.

He will take up the role of EuChemS Treasurer on 1 January 2023 after Prof Ekhart Ruhl completes his term of office.

European Young Chemists' Awards Finalists

Aug 17, 2022





EuChemS
 European Chemical Society
 — European Young Chemists' Network —



EYCA@8
 EUROPEAN YOUNG
 CHEMISTS' AWARD

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

In person oral presentation,
 open to ECC8 Audiences

at the 8th EuChemS Chemistry Congress,
30 August


www.euchems.eu



EuChemS
 European Chemical Society

The **European Young Chemists' Award (EYCA)** is given biannually to young chemists with outstanding achievements. After evaluating all applications in two categories – Early Career Researcher and PhD – 6 finalists were selected in each:

PhD level: Luca Maria Cavinato, Antonio Faggiano, Sara Grecchi, Anirban Mondal, Sebastian Weber, Bowen Zhang.

Early Career Researcher level: Serena Arnaboldi, Claudia Bonfio, Luka Dordevic, Cesar de la Fuente, Erica Del Grosso, , Simona Ranallo

The finalists are given the opportunity to present at the 8th EuChemS Chemistry Congress (ECC8) on 30 August, in front of a jury and an audience. A Gold and a Silver medal will be awarded in each category, and the winners will receive their honours during the closing ceremony of the congress.



EuChemS Award nominations open up

Sep 19, 2022

Nominations for the EuChemS Gold Medal, the EuChemS Lecture Award, the EuChemS Awards for Service and the EuChemS Historical Landmark Awards are open.

All the nominations below are open until 19 December, 18:00 CET.

Learn more, and find the nomination forms below. Click to open.

- [EuChemS Gold Medal](#)
- [EuChemS Lecture Award](#)
- [EuChemS Awards for Service](#)
- [EuChemS Historical Landmark Awards](#)



EuChemS Awards for Service Presented in 2022 at ECC8

Four recipients of the EuChemS Awards for Service have received their awards at the 8th EuChemS Chemistry Congress in Lisbon, Portugal, on September 1, 2022.

Livia Simon Sarkadi, Hungarian University of Agriculture and Life Sciences, Budapest, Szent István University, Gödöllő, Hungary, and Corvinus University of Budapest is the 2021 awardee.

Antonio Laganà, University of Perugia, Italy, and Jan Mehlich, University of Bonn, Germany, are the 2020 awardees.

Ehud Keinan, President of the Israel Chemical Society and Emeritus at Technion – Israel Institute of Technology, Haifa, is the 2019 awardee.

The EuChemS Award for Service acknowledges outstanding commitment with regard to fostering chemistry and molecular sciences in Europe, as well as the goals of EuChemS.

More Details are available in **ChemistryViews** at:

[**EuChemS Awards for Service Presented - ChemistryViews**](#)

And

[**EuChemS Award for Service - EuChemS**](#)

Subscribe: [Newletters singup - EuChemS Newsletters](#)

Read: [Chemistry in Europe • 2022-3 - EuChemS Newsletters](#)

Chemistry in Europe Editorial.

Science is international



Science is an international endeavour and collaborative in nature. It offers the most benefit to society when researchers from different backgrounds – be that country, sector or discipline – come together to share knowledge and expertise.

International collaboration is critical to the success of the chemical sciences. We all know chemistry plays many vital roles in tackling global challenges, such as achieving net zero ambitions, developing new, greener products, and improving human health.

Through countless conversations and the Royal Society of Chemistry's [Science Horizons](#) report, we know international collaboration is crucial for the advancement of chemistry, alongside collaboration between disciplines and sectors.

European Framework Programmes are an essential enabler for this. The strength of the partnerships they develop provides enormous benefits.

European Framework Programmes are important for the chemical sciences. Through Horizon 2020, the chemical sciences have been awarded over €7 billion in funding and there were over 16,000 participants (people or organisations) in chemical science-related projects. Even more importantly, it has catalysed many fruitful collaborations.

Since 2016, the Royal Society of Chemistry and many other science bodies have made a strong case for UK association to Horizon Europe. While we still hope this will happen and it is set out in treaty agreements, wider political disputes could easily prevent it. This is a major concern for scientists based in the UK, who value European collaborations and the programmes that make this easy. I and they appreciate the efforts other European chemical societies and chemical scientists are making by speaking up for maintaining collaboration, for example through the [Stick to Science](#) campaign.

Whatever happens with UK association to Horizon Europe, the Royal Society of Chemistry will continue to support our community in seeking to collaborate both Europe-wide and world-wide for the good of science. We are proud to be a member of EuChemS and will continue to work with other European chemical societies to help chemical scientists work together to make the world a better place.

Helen Pain

Chief Executive of the Royal Society of Chemistry, UK



BRUSSELS NEWS UPDATES

Brussels News Updates (BNU) is EuChemS' monthly newsletter addressing policy makers, citizens with an interest in chemistry, entrepreneurs, and chemists. BNU aims to show chemistry's role in society, how chemistry influences policy decisions, how it can support innovation, and how it influences our everyday lives.

Click below for the latest edition and subscribe now for your monthly update!

Read:

[EuChemS Brussels News Updates • September 2022 - EuChemS Newsletters](#)

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For more about EuChemS click to home page:

[Home - EuChemS](#)



Irish Research Council announces €27m in Irish Research Council funding to support the next generation of top researchers

30 September 2022

The Irish Research Council has today (30.09.22) announced €27m in funding for new research projects under the Irish Research Council's flagship Government of Ireland programmes. The investment will fund 316 awards in total, namely 239 postgraduate scholarships and 77 postdoctoral fellowships.

Under the scheme, the awardees will conduct research on a multitude of topics, ranging from a future Irish arts policy, machine translation and social media, protecting wild bee populations and bioplastics.

Welcoming the announcement, Louise Callinan, Director of the Irish Research Council, said: "The prestigious Government of Ireland awards recognise and fund pioneering research projects, along with addressing new and emerging fields of research that introduce creative and innovative approaches across all disciplines, including the sciences, humanities and the arts.

To continue reading and see who the awardees are go to:

[Irish Research Council announces €27m in Irish Research Council funding to support the next generation of top researchers | News | Irish Research Council](#)

New national Research and Innovation Strategy is a pivotal opportunity for Irish research

11 July

[New national Research and Innovation Strategy is a pivotal opportunity for Irish research | News | Irish Research Council](#)

Minister Harris announces €28.5 million investment in emerging research talent

29 August

[Minister Harris announces €28.5 million investment in emerging research talent | News | 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.

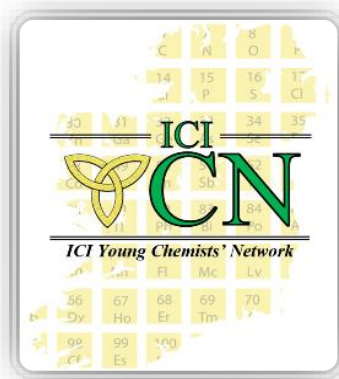
The committee of the online research symposium was made up of postgraduate students from various institutions in Ireland. As this committee worked in great harmony together, and had already established connections while organising the symposium, it was suggested to keep this committee for the IYCN. The 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.

New Committee 2022:

Name	Position	Representation
Colm McKeever	Chairperson	MU
Jessica O'Neill	Secretary/Vice Chair	DCU
Joseph Byrne	Advisor (Non-Voting)	NUIG
Liam Fitzgerald	Treasurer	NUIG
Siobhán O'Flaherty	PRO	RCSI
Ciara Davis	PRO	TUS
Nicolás Rojas Sanabria	Committee Member	UL
Cathal Kelly	Committee Member	QUB
Hong Ann Gan	Committee member	TUS
Sean Byrne	Committee member	UCD



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- Software control



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Irish University & 3rd Level Chemistry News

Note:

The source material for the following section is provided by the relevant educational institutions. I will be endeavouring to improve this section of ICN by seeking timely updated feeds from the institutions.

I have reached out to heads of chemical sciences departments but the response has been poor. This is likely due to the pressure on everyone in chemistry departments. I ask Heads of Chemistry Schools/Departments to check their junk mail boxes and mark my email:

editor@chemistryireland.org as safe or never block sender!

Lot of goals and good achievements are being attained but we need to hear about them.

I can only include your good stories if you send them to me as they happen and I can coordinate them for inclusion in the next Issue of ICN which will be June 2022. These news items don't have to be long, even a paragraph can be useful and photos of high achievers or accomplishments and events are welcome.

Only one University submitted material or links for this Issue.



School of Chemistry



SEFS Student Nominated Staff Awards 2021



New South East Technological University will be formally established in May 2022



Waterford Institute of Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE



INSTITUTE of
TECHNOLOGY
CARLOW

Institiúid Teicneolaíochta Cheatharlach



TUS: Midlands Midwest



RCSI

Self-sterilising plastic kills viruses like Covid

By James Gallagher

Health and science correspondent

9 September



The plastic sheets sterilise themselves when exposed to light

Scientists have developed a virus-killing plastic that could make it harder for bugs, including Covid, to spread in hospitals and care homes.

The team at Queen's University Belfast say their plastic film is cheap and could be fashioned into protective gear such as aprons.

It works by reacting with light to release chemicals that break the virus.

The study showed it could kill viruses by the million, even in tough species which linger on clothes and surfaces.

The research was accelerated as part of the UK's response to the Covid pandemic.

Studies had shown the Covid virus **was able to survive for up to 72 hours** on some surfaces, but that is nothing compared to sturdier species. Norovirus - known as the winter vomiting bug - **can survive outside the body for two weeks** while waiting for somebody new to infect.

The team of chemists and virologists investigated self-sterilising materials that reduce the risk of contaminated surfaces spreading infections.



The idea is to make a material so hostile to a virus that it cannot survive there. The metal copper has been shown **to kill microbes** on contact, but is not very flexible.

So the researchers used thin sheets of plastic that contained nanoparticles of titanium dioxide. These react with ultraviolet light - even the tiny amount released from a fluorescent bulb - to release molecules called reactive oxygen species.

These are just itching to get involved in any chemical reaction. They react with the virus's genetic material, the proteins it uses to invade our body and the fatty sphere that holds it all together. The end result is a dead and useless virus.

"This is the first time that anything like this has been developed," said Prof Andrew Mills, from the university's chemistry department.

He added: "This film could replace many of the disposable plastic films used in the healthcare industry as it has the added value of being self-sterilising at no real extra cost."

The material was tested in the laboratory against four types of virus - two influenzas, the Covid virus and a picornavirus, which has the traits that make a virus highly stable outside the body.

In controlled laboratory conditions, about one million virus particles were placed on the self-sterilising plastic. This is far beyond the amount of virus that would be needed to start an infection.

"It goes from one million viruses down to nothing, and we can see an effect in less than one hour and maximum death in two hours," said Dr Connor Bamford, from the school of medicine at Queen's.

"But we are adding a super-amount of virus to really challenge the system, it is likely there is an effect in the first few minutes."

He said current personal protective equipment used in hospitals did a good job, but "infections can take place when you take off or put on the PPE, so this can help".

Other areas being investigated include hospital tablecloths and curtains, as well as in the food processing industry.

However, it will take proper trials in the real world to work out how big a difference self-sterilising protective gear could make.

The study has been published in the journal of Journal of Photochemistry and Photobiology B: Biology.
<https://doi.org/10.1016/j.jphotobiol.2022.112551>

Follow James **on Twitter.**

Images (IMAGE SOURCE,QUB)



Congratulations to Chantelle Capicciotti for winning the 2022 Prize for Excellence in Research!

Jun 21, 2022

Congratulations to Chantelle Capicciotti for winning the 2022 Prize for Excellence in Research! Dr. Capicciotti is one of three recipients of this prize which is the highest internal research award at Queen's University. The Prizes for Excellence in Research will be presented during convocation. To read more about recognizing research excellence, please see the [Queen's Gazette](#) article.

Congratulations to Dr Guojun Liu who was recently appointed to the Royal Society of Canada!

8 September

Congratulations to Dr Guojun Liu who was recently appointed to the Royal Society of Canada. Please view the [Gazette article](#) highlighting his outstanding accomplishments.

QUEEN'S PRIZES FOR EXCELLENCE IN RESEARCH ANNOUNCED

June 22, 2022 > *[Chemistry](#) *[Kinesiology and Health Studies](#)

Three early-career researchers are recognized for advancing research and discovery in their respective fields

Three researchers have been awarded with the university's highest internal research award, the Prize for Excellence in Research. Jennifer Tomasone (Kinesiology and Health Sciences), Cao Thang Dinh (Chemical Engineering), and Chantelle Capicciotti (Biomedical and Molecular Sciences, Chemistry, and Surgery) are early-career researchers that have demonstrated significant contributions to research in their fields: physical activity, renewable energy, and glycobiology.

The Prize for Excellence in Research is awarded by the Vice-Principal (Research Portfolio) and celebrate researchers with distinguished contributions to their fields and who have earned their highest degree in the last ten years. Each recipient of the prize is nominated by the Dean of their faculty. Nominations are then reviewed by a selection committee who place an emphasis on representing the diversity of the Queen's community and its research. The recipients are awarded a cash prize of \$5,000.

"I am delighted to present the first Prizes for Excellence in Research of my tenure to such accomplished and inspiring early-career researchers," says Nancy Ross, Vice-Principal (Research). "It is gratifying to acknowledge researchers early on in their careers and early prizes can be an important foundation for mid- and later career recognition. From climate change to human health and disease, your award-winning research contributions will advance our understanding of people and the planet."



Dr Tomasone's primary goal is to optimize physical activity participation for Canadians of all abilities. Her research is significant nationally, as Dr. Tomasone leads the most comprehensive knowledge translation campaign in the 40-year history of Canadian movement guidelines. Her research also goes beyond borders to aid efforts in movement guidelines internationally, working with organizations like the World Health Organization. Within the community, Dr. Tomasone is the Co-Director of **Revved Up(link is external)**, an exercise program for over 200 adults with a disability in Kingston.



Dr Dinh has been designated by Web of Science as one of only three Queen's researchers most-cited globally in 2021. His program centres on using renewable energy to convert carbon dioxide, air and water into valuable chemicals. The aim is to provide solutions for a fossil-fuel-free energy and chemical industry, focusing on the design of novel electrocatalytic systems using renewable energy. This research provides a compelling route to mitigate climate change and enable widely accessible renewable energy.



Dr Capicciotti is a Queen's National Scholar whose interdisciplinary research in glycobiology and carbohydrate chemistry has been recognized as innovative on an international scale. Drawing from chemistry, biochemistry, and cell biology, she has developed streamlined methods to synthesize complex carbohydrates, and novel biochemical tools to study their interactions. Dr. Capicciotti leverages this interdisciplinary work to understand the biological functions of these crucial biomolecules. Her research is providing innovative insights into the role that the thick 'sugar coating' on cells plays in human health and disease, including cell signalling, virus infections, and cancer immune evasion.

The Prizes for Excellence in Research will be presented at convocation over the next few weeks. To learn more about the awards, or past recipients, visit the Vice Principal (Research) Portfolio **website**.

Note: This article originally appeared in the **Queen's Gazette**.



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin



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28 September 2022, Issue 36,
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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.

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Publishing frequency: 48 per year

Indexed in MEDLINE and Web of Science



Royal Irish Academy

Winners announced 2022 US-Ireland Research Innovation Awards

27 May 2022

The 2022 US-Ireland Research Innovation Awards – a joint initiative of the Royal Irish Academy and the American Chamber of Commerce, Ireland (AmCham) - were announced at the AmCham annual dinner on Friday, 20 May 2022 at the Clayton Hotel, Burlington Road, Dublin.

The awards were presented in the presence of the President and Officers of the Academy, representatives of the Irish operations of US Multinational Companies, Higher Education Institutions in Ireland, SMEs and other distinguished public figures. Minister for Further and Higher Education, Research, Innovation and Science Simon Harris, T.D. gave the keynote address.

These awards recognise excellence in research innovation, creation, process and invention by multinationals as well as SMEs, higher education institutions and research centres with links to the US multinational sector. The 2022 US-Ireland Research Innovation Awards are proudly sponsored by BT Ireland and EY Ireland, and the Irish Times is the media partner.

Three awards were presented on the night in the categories of Innovation in Sustainability, Innovation in Talent Development and Innovation in Enabling Technology.

The companies shortlisted for the awards were:

- Bank of America Europe,
- Boston Scientific,
- Xperi,
- Janssen Sciences Ireland,
- Maynooth University with Microsoft Ireland,
- Pfizer,
- Stryker
- Microsoft Ireland.

Winners

Innovation in Sustainability Award:

Maynooth University with Microsoft Ireland for 'Terrain – AI'

Innovation in Enabling Technologies Award

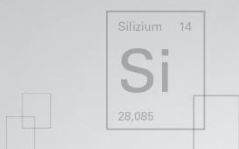
Janssen Sciences Ireland for ‘Solving the buffer solution bottleneck through process intensification’

Innovation in Talent Development Award

Stryker for the Stryker engineering apprenticeship program

For more details and to watch video highlights go to:

[Winners announced 2022 US-Ireland Research Innovation Awards | Royal Irish Academy \(ria.ie\)](https://ria.ie/winners-announced-2022-us-ireland-research-innovation-awards)



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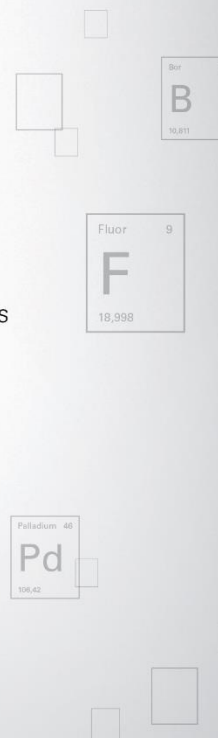


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Chemistry and related Science around the World

Chemistry and Related Technology June - September 2022

Research paves the way for stronger alloys

1 June

<https://phys.org/news/2022-06-paves-stronger-alloys.html>

DOI: [10.1016/j.actamat.2022.117903](https://doi.org/10.1016/j.actamat.2022.117903)

New study takes aim at stronger metals - Materials Today

31 May

<https://www.materialstoday.com/metals-alloys/news/new-study-takes-aim-at-stronger-metals>

Metallic five-membered ring pushes the boundaries of aromaticity

2 June

<https://phys.org/news/2022-06-metallic-five-membered-boundaries-aromaticity.html>

DOI: [10.1002/anie.202206963](https://doi.org/10.1002/anie.202206963)

Boosting the performance of single-atom catalysts via external electric field polarization | Nature Communications

2 June

[Boosting the performance of single-atom catalysts via external electric field polarization | Nature Communications](https://doi.org/10.1038/s41467-022-30766-x)

DOI <https://doi.org/10.1038/s41467-022-30766-x>

Researchers awarded for contribution to innovation at UCC ceremony

1 June

[Researchers awarded for contribution to innovation at UCC ceremony \(echolive.ie\)](https://echolive.ie)

The World's Most Popular Weed Killer Has a Previously Unknown Effect on Bumblebees

2 June

[The World's Most Popular Weed Killer Has a Previously Unknown Effect on Bumblebees \(sciencealert.com\)](https://sciencealert.com)

Glyphosate impairs collective thermoregulation in bumblebees

2 June

[Glyphosate impairs collective thermoregulation in bumblebees \(science.org\)](https://science.org)

DOI: [10.1126/science.abf7](https://doi.org/10.1126/science.abf7)

Study uncovers how structural changes affect the superconducting properties of a metal oxide

1 June

[Study uncovers how structural changes affect the superconducting properties of a metal oxide | College | College of Science and Engineering \(umn.edu\)](#) and

Anomalous transport in high-mobility superconducting SrTiO₃ thin films

25 May

[Anomalous transport in high-mobility superconducting SrTiO₃ thin films \(science.org\)](#)

DOI: [10.1126/sciadv.abl56](#)

Researchers develop new method for the technological use of 2D nanomaterials

31 May

[Researchers develop new method for the technological use of 2D nanomaterials \(phys.org\)](#)

DOI: [10.1126/sciadv.abn9084](#)

Electropolymerization without an electric power supply

27 May

<https://phys.org/news/2022-05-electrochemical-synthesis-electric-power-source.html>

DOI: [10.1038/s42004-022-00682-8](#)

Promising new materials mimic muscle structure and function

3 June

<https://phys.org/news/2022-06-materials-mimic-muscle-function.html>

DOI: [10.1038/s41565-022-01133-0](#)

Nonlinear elasticity, yielding, and entropy in amorphous solids

1 June

[Nonlinear elasticity, yielding, and entropy in amorphous solids \(science.org\)](#)

DOI: [10.1126/sciadv.abm80](#)

From black holes to sands: Application of holographic duality to granular matter

2 June

[From black holes to sands: Application of holographic duality to granular matter \(phys.org\)](#)

DOI: [10.1126/sciadv.abm8028](#)

Young STEM star wins €10,000 prize for Limerick school

2 June

<https://www.rte.ie/news/munster/2022/0601/1302538-stem-stars-winner>

Young STEM star wins €10,000 prize for Limerick school

2 June

[Young STEM star wins €10,000 prize for Limerick school \(rte.ie\)](#)

Engineers model nanoscale crystal dynamics in easy-to-view system

3 June

[Engineers model nanoscale crystal dynamics in easy-to-view system \(phys.org\)](#)

DOI: [10.1126/sciadv.abn5715](#)

Sunscreen: new natural antioxidant ingredient could boost protection – and other things you should know

30 May

[Sunscreen: new natural antioxidant ingredient could boost protection – and other things you should know \(theconversation.com\)](#)

Synthesis of tetraphenylammonium: Confirmation of the existence of the phantom ion

3 June

<https://phys.org/news/2022-06-synthesis-tetraphenylammonium-phantom-ion.html>

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1 June

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DOI <https://doi.org/10.1038/s41586-022-04773-3>

MIT Chemists Design New Light-Powered Catalysts That Could Aid in Manufacturing

4 June

[MIT Chemists Design New Light-Powered Catalysts That Could Aid in Manufacturing \(scitechdaily.com\)](https://scitechdaily.com/mit-chemists-design-new-light-powered-catalysts-that-could-aid-in-manufacturing/)

DOI: [10.1038/s41467-022-29811-6](https://doi.org/10.1038/s41467-022-29811-6)

Molecular Machines: Bacteria-Killing Drills Get an Upgrade

1 June

[Molecular Machines: Bacteria-Killing Drills Get an Upgrade \(scitechdaily.com\)](https://scitechdaily.com/molecular-machines-bacteria-killing-drills-get-an-upgrade/)

DOI: [10.1126/sciadv.abm2055](https://doi.org/10.1126/sciadv.abm2055)

Computer Simulations Could Help PFAS Removal From Soil | Technology Networks

6 June

[Computer Simulations Could Help PFAS Removal From Soil | Technology Networks](https://www.technology-networks.com/news/computer-simulations-could-help-pfas-removal-from-soil/)

doi: [10.1021/acs.est.2c01054](https://doi.org/10.1021/acs.est.2c01054)

New ‘wonder material’ graphyne synthesized in two labs

4 June

[New ‘wonder material’ graphyne synthesized in two labs – Physics World](https://www.physicsworld.com/news/new-wonder-material-graphyne-synthesized-in-two-labs/)

Surface Layer Improves Carbon Dioxide Capture

3 June

[Surface Layer Improves Carbon Dioxide Capture | Chemical Processing](https://www.chemical-processing.com/news/surface-layer-improves-carbon-dioxide-capture/)

Organic Catalyst Boasts Big Benefits

6 June

[Organic Catalyst Boasts Big Benefits | Chemical Processing](https://www.chemical-processing.com/news/organic-catalyst-boasts-big-benefits/)

Superionic compound with the highest hydrogen content successfully predicted and explored

2 June

[Superionic compound with the highest hydrogen content successfully predicted and explored \(phys.org\)](https://phys.org/news/2022-06-superionic-compound-with-the-highest-hydrogen-content-successfully-predicted-and-explored.html)

DOI: [10.1002/adma.202200924](https://doi.org/10.1002/adma.202200924)

Fingerprinting Technique Developed To Verify the Geographical Origins of Virgin Olive Oil

26 May

[Fingerprinting Technique Developed To Verify the Geographical Origins of Virgin Olive Oil | Technology Networks](https://www.technology-networks.com/news/fingerprinting-technique-developed-to-verify-the-geographical-origins-of-virgin-olive-oil/)

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1 June

<https://pubs.acs.org/doi/10.1021/acs.chemrev.1c00987>

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Liquid platinum at room temperature: The 'cool' catalyst for a sustainable revolution in industrial chemistry

6 June

[Liquid platinum at room temperature: The 'cool' catalyst for a sustainable revolution in industrial chemistry \(phys.org\)](#)

DOI: [10.1038/s41557-022-00965-6](https://doi.org/10.1038/s41557-022-00965-6).

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Scientists Have Broken a Staggering Record on The Melting Point of Platinum

6 June

[Scientists Have Broken a Staggering Record on The Melting Point of Platinum \(sciencealert.com\)](#)

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Breakthrough artificial photosynthesis comes closer

1 June

<https://phys.org/news/2022-06-breakthrough-artificial-photosynthesis-closer.html>

Guest-induced amorphous-to-crystalline transformation enables sorting of haloalkane isomers with near-perfect selectivity

3 June

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DOI: [10.1126/sciadv.abo2255](https://doi.org/10.1126/sciadv.abo2255)

All wound up: A reversible molecular whirligig

6 June

<https://phys.org/news/2022-06-wound-reversible-molecular-whirligig.html>

DOI: [10.1021/jacs.2c02547](https://doi.org/10.1021/jacs.2c02547)

What makes smoky, charred barbecue taste so good? - Big Think

3 June

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1 June

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Nano-sensor detects pesticides on fruit in minutes

7 June

[Nano-sensor detects pesticides on fruit in minutes \(phys.org\)](#)

DOI: [10.1002/advs.202201133](https://doi.org/10.1002/advs.202201133)

Extremely sensitive nano-sensors can detect trace amounts of molecules

19 April

[Extremely sensitive nano-sensors can detect trace amounts of molecules \(phys.org\)](#)

DOI: [10.1002/adfm.202200148](https://doi.org/10.1002/adfm.202200148)

Using chemical-vapor deposition to build five layered single-crystal hexagonal boron nitride structures

7 June

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DOI: [10.1038/s41586-022-04745-7](https://doi.org/10.1038/s41586-022-04745-7)

Clathrate superhydride makes new high-temperature superconductor – Physics World

6 June

[Clathrate superhydride makes new high-temperature superconductor – Physics World](#)

General Graphene: Achieving scalable mass production of graphene

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[General Graphene: Achieving scalable mass production of graphene \(innovationnewsnetwork.com\)](#)

Engineered non-covalent π interactions as key elements for chiral recognition | Nature Communications

7 June

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"E-Nose" Can Distinguish Between Similar, Harmful Volatile Organic Compounds

9 June

["E-Nose" Can Distinguish Between Similar, Harmful Volatile Organic Compounds | Technology Networks](#)

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Novel silver hollow fiber boosts CO₂ electroreduction

6 June

<https://phys.org/news/2022-06-silver-hollow-fiber-boosts-co2.html>

DOI: [10.1038/s41467-022-30733-6](https://doi.org/10.1038/s41467-022-30733-6)

Eliminating the need for anodic gas separation in CO₂ electroreduction systems via liquid-to-liquid anodic upgrading | Nature Communications

2 June

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The Chemistry of the Sun: Resolving a Decade-Long Controversy About the Composition of Our Star

9 June

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Investigating the magnetic properties of helium-3

8 June

<https://phys.org/news/2022-06-magnetic-properties-helium-.html>

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Textile filter testing shows promise for carbon capture

3 June

[Textile filter testing shows promise for carbon capture \(techxplore.com\)](https://techxplore.com/news/2022-06-textile-filter-testing-shows-promise-for-carbon-capture.html)

DOI: 10.1021/acssuschemeng.2c02545

New electrocatalyst offers hope for less expensive hydrogen fuel

6 June

[New electrocatalyst offers hope for less expensive hydrogen fuel \(techxplore.com\)](https://techxplore.com/news/2022-06-new-electrocatalyst-offers-hope-for-less-expensive-hydrogen-fuel.html)

DOI: 10.1038/s41699-022-00300-0

Scientists use multivalent cation additives to rid rechargeable batteries of a common pitfall

6 June

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A novel process to capture and convert CO₂ from air

6 June

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Delta CleanTech, Muskowekwan First Nation partner on carbon capture blockchain project

9 June

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Carbon-Removal Industry Draws Billions to Fight Climate Change – WSJ

8 June

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Solution or Band-Aid? Carbon Capture Projects Are Moving Ahead - Yale E360

7 June

<https://e360.yale.edu/features/solution-or-band-aid-carbon-capture-projects-are-moving-ahead>

New Device Purifies Saltwater Over a 1000 Times Faster Than Standard Industrial Equipment

10 June

[New Device Purifies Saltwater Over a 1000 Times Faster Than Standard Industrial Equipment \(scitechdaily.com\)](https://scitechdaily.com/new-device-purifies-saltwater-over-a-1000-times-faster-than-standard-industrial-equipment/)

DOI: 10.1126/science.abd0966

Lights, Catalyst, Reaction! Photoreduction of CO₂ Into Transportable Fuel

12 June

[Lights, Catalyst, Reaction! Photoreduction of CO₂ Into Transportable Fuel \(scitechdaily.com\)](https://scitechdaily.com/lights-catalyst-reaction-photoreduction-of-co2-into-transportable-fuel/)

DOI: 10.1002/anie.202204948

Asymmetric synthesis of flavanols via Cu-catalyzed kinetic resolution of chromenes and their anti-inflammatory activity

3 June

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Nickel catalyzed multicomponent stereodivergent synthesis of olefins enabled by electrochemistry, photocatalysis and photo-electrochemistry | Nature Communications

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Women in electrochemistry put science first – Physics World

9 June

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The Chemistry of the Sun: Resolving a Decade-Long Controversy About the Composition of Our Star

9 June

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Can we make graphite from coal? Researchers start by finding new carbon solid

10 June

[Can we make graphite from coal? Researchers start by finding new carbon solid \(phys.org\)](https://www.phys.org/news/story/2022-06-can-we-make-graphite-from-coal-researchers-start-by-finding-new-carbon-solid)
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Chemistry group at Hokkaido up to three retractions – Retraction Watch

9 June

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A stolen manuscript, part two: The plagiarist begs for forgiveness as another group plagiarizes the same work – Retraction Watch

6 June

[A stolen manuscript, part two: The plagiarist begs for forgiveness as another group plagiarizes the same work – Retraction Watch](https://www.retractionwatch.com/2022/06/06/a-stolen-manuscript-part-two-the-plagiarist-begs-for-forgiveness-as-another-group-plagiarizes-the-same-work/)

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10 June

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Graphene charge-injection photodetectors with a broader detection bandwidth

10 June

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DOI: [10.1038/s41928-022-00755-5](https://doi.org/10.1038/s41928-022-00755-5)

New eco-friendly synthesis method uses alumina as a recyclable catalyst

10 June

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[DOI: 10.1002/open.202200042](#)

Caesium: A rare element with huge potential in innovative technologies

12 May

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A system for the reversible hydrogenation of carbon dioxide into formic acid

13 June

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Just in! A nano-sensor that detects pesticides on fruit in minutes

7 June

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New, highly tunable composite materials—with a twist

14 June

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"E-Nose" Can Distinguish Between Similar, Harmful Volatile Organic Compounds | Technology Networks

9 June

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Engineering gold-platinum core-shell nanoparticles by self-limitation in solution

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[Scientists Have Found a Way to Save Energy And Boil Water More Efficiently \(sciencealert.com\)](https://www.sciencealert.com/scientists-have-found-a-way-to-save-energy-and-boil-water-more-efficiently)

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Toward sustained, stable Raman imaging of large samples at the nanoscale

15 July

[Toward sustained, stable Raman imaging of large samples at the nanoscale \(phys.org\)](https://phys.org/news/2022-07-toward-sustained-stable-raman-imaging-large-samples-nanoscale.html)

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Tiny Motors Take a Big Step Forward: First-Ever Solid-State Optical Nanomotor

17 July

[Tiny Motors Take a Big Step Forward: First-Ever Solid-State Optical Nanomotor \(scitechdaily.com\)](https://www.scitechdaily.com/tiny-motors-take-a-big-step-forward-first-ever-solid-state-optical-nanomotor/)

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Researchers accelerate imaging techniques for capturing small molecules' structures with graphene

12 July

[Researchers accelerate imaging techniques for capturing small molecules' structures with graphene \(nanowerk.com\)](https://nanowerk.com/news/researchers-accelerate-imaging-techniques-for-capturing-small-molecules-structures-with-graphene/)

The Ability of Nitrogen and Oxygen to Make Hydrogen Bonds

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German chemical industry has no gas left to cut, warns association | Reuters

19 July

[German chemical industry has no gas left to cut, warns association | Reuters](https://www.reuters.com/business/energy/german-chemical-industry-has-no-gas-left-cut-warns-association-2022-07-19/)

Record spending on research by universities, colleges

19 July

[Record spending on research by universities, colleges \(rte.ie\)](https://www.rte.ie/science/2022/07/19/record-spending-on-research-by-universities-colleges/)

A demonstration of real-space imaging of some of the most representative forms of hydrated protons

18 July

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RSC _ New Journal: Industrial Chemistry & Materials – Open Access

July

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Researchers develop computer model to predict whether a pesticide will harm bees

13 July

[Researchers develop computer model to predict whether a pesticide will harm bees \(phys.org\)](https://phys.org/news/2022-07-researchers-develop-computer-model-to-predict-whether-a-pesticide-will-harm-bees.html)

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MIT researchers study and discover how to make metal lighter and stronger

July

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New refining technique makes cheaper superconductors a reality

19 July

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This Weird New Phase of Matter Seems to Occupy 2 Time Dimensions

21 July

[This Weird New Phase of Matter Seems to Occupy 2 Time Dimensions \(sciencealert.com\)](https://www.sciencealert.com/this-weird-new-phase-of-matter-seems-to-occupy-2-time-dimensions)

DOI <https://doi.org/10.1038/s41586-022-04853-4>

Chemistry, Colors, Images and Reality | Science | AAAS

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A DNA origami rotary ratchet motor | Nature

20 July

[A DNA origami rotary ratchet motor | Nature](https://www.nature.com/articles/s41586-022-04910-y)

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Engineering circular RNA for enhanced protein production | Nature Biotechnology

18 July

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22 July

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All-In-One Solar-Powered Tower Makes Carbon-Neutral Jet Fuel

20 July

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MIT Discovers Semiconductor That Can Perform Far Better Than Silicon

22 July

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A kinetic descriptor for the electrolyte effect on the oxygen reduction kinetics on Pt(111) | Nature Catalysis

7 July

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Deep learning for new alloys

21 July

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Future of Graphene and MXenes in Flexible Electronics Compared

20 July

[Future of Graphene and MXenes in Flexible Electronics Compared \(azonano.com\)](#)

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19 July

<https://physics.aps.org/articles/v15/s98>

Physicists Create Mind-Bending New Phase of Matter That Acts Like It Has Two Time Dimensions

22 July

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Chemistry breakthrough offers unprecedented control over atomic bonds

21 July

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Porous crystals bind fluorine-containing greenhouse gases

22 July

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Chemists create artificial protein that peers into Earth's chemical past

20 July

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Discovery, total syntheses and potent anti-inflammatory activity of pyrrolinone-fused benzoazepine alkaloids Asperazepanones A and B from Aspergillus candidus | Communications Chemistry

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High-speed storage of CO₂ discovered in bacteria | University of Basel

21 July

[High-speed storage of CO2 discovered in bacteria | University of Basel \(unibas.ch\)](https://doi.org/10.1038/s41586-022-04971-z)

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Exclusive: Laser-fusion facility heads back to the drawing board

22 July

[Exclusive: Laser-fusion facility heads back to the drawing board \(nature.com\)](https://doi.org/10.1038/d41586-022-02022-1)

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Strange, never-before-seen diamond crystal structure found inside 'Diablo canyon' meteorite

25 July

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New leap in understanding nickel oxide superconductors

25 July

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Focus on research: Prof Michael Morris, Amber - TechCentral.ie

26 July

[Focus on research: Prof Michael Morris, Amber - TechCentral.ie](https://doi.org/10.1038/s41467-022-31924-x)

Researchers improve catalyst that destroys 'forever chemicals' with sunlight

25 July

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High-performance aluminum alloys can now be produced with little energy - MINING.COM

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Can reengineered aluminum help fill the demand for copper? | WIRED Middle East

25 July

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Low-cost titanium alloys for additive manufacturing targeted by IperionX and Oak Ridge National Laboratory collaboration - 3D Printing Industry

26 July

[Low-cost titanium alloys for additive manufacturing targeted by IperionX and Oak Ridge National Laboratory collaboration - 3D Printing Industry](#)

New research furthers understanding of the electronic structure of graphite

19 July

[New research furthers understanding of the electronic structure of graphite \(phys.org\)](#)

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Revisiting stress-corrosion cracking and hydrogen embrittlement in 7xxx-Al alloys at the near-atomic-scale

25 July

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27 July

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European Commission approves €500m Irish investment support scheme - TechCentral.ie

28 July

[European Commission approves €500m Irish investment support scheme - TechCentral.ie](#)

How to make jet fuel from sunlight, air and water vapor | Science News

26 July

[How to make jet fuel from sunlight, air and water vapor | Science News](#)

Nonthermal plasma-promoted CO₂ hydrogenation in presence of alloy catalysts

22 July

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25 July

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First electric nanomotor made from DNA material

21 July

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Graphene scientists capture first images of atoms 'swimming' in liquid

27 July

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28 July

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27 July

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28 July

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Mapping electric fields to help unravel how enzymes work

28 July

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Researchers regulate pore size distribution to improve nanofiltration membrane

27 July

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New bioremediation material can clean 'forever chemicals'

28 July

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A place of discovery where innovation thrives

July (commercial promotion)

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Improvements Made to Catalyst That Destroys "Forever Chemicals" With Sunlight | Technology Networks

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Research reveals the chemical underpinnings of how benign water can transform into harsh hydrogen peroxide

2 August

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EPA Whistleblowers Provide New Evidence of Failure to Assess Dangerous Chemicals

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New method to promote biofilm formation and increase efficiency of biocatalysis

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Researchers measure a signature of superconducting interference at the atomic scale

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A new method converts fish waste into valuable carbon-based nanomaterials in only 10 seconds

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2 August

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New 'lab on a chip' may accelerate carbon storage efforts

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New Material Removes Toxic Chromium and Arsenic From Water

27 July

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Physicists Finally Measure a Long Theorized Molecule Made From Light And Matter

4 August

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Mechanism of the Aryl–F Bond-Forming Step from Bi(V) Fluorides | Journal of the American Chemical Society

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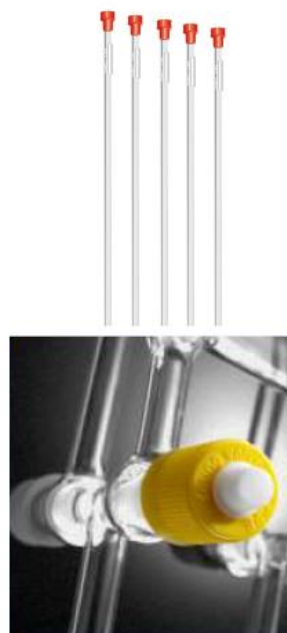
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E-mail: info@gpescientific.co.uk

Website: <http://www.gpescientific.ie>

Company Information:

GPE Scientific Ltd was established in 1962 and is a leading distributor and manufacturer of laboratory equipment, glass blowing products and specialised glass components for the industrial, laboratory and research markets. There are many reasons to choose GPE Scientific above our competitors; we pride ourselves in stocking thousands of products from leading suppliers providing you with the best selection of laboratory equipment on the market. This includes being the exclusive distributors for Chemglass Life Sciences and Chemical Reactors, Norell NMR Tubes and Accessories and the portable Nanalysis NMReady Benchtop Spectrometer.

Solar Cell Chemistry & Technology June – September 2022

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1 June

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7 June

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SFI News, Updates & Reports



Science Foundation Ireland is committed to the principles of the San Francisco Declaration on Research Assessment (DORA)

Science Foundation Ireland (SFI), as a signatory of the [San Francisco Declaration on Research Assessment \(DORA\)](#), has made a formal commitment to fair and responsible research assessment practices.—

To this end, SFI is changing the way its review process assesses the quality and impact of research outputs, by moving away from journal impact factors, the h-index and other types of metrics, towards a broader, more holistic view of researchers' achievements. To support this, [SFI has introduced the narrative CV format to all programme funding calls from 2019 onwards](#), where applicants are instructed to describe their research achievements in four key areas: generation of knowledge, development of individuals and collaborations, contributions to the research community, and contributions to society and the economy.

By using this format, SFI is prioritising the content/quality of publications in the evaluation process over the publication venue. Qualitative indicators of impact are also being considered, including a researcher's contributions to developing the next generation of research talent, to society, the economy and research community, and evidence of facilitating a positive research culture. The use of open science principles and approaches, such as preprints, open-source software, and data publication, are also being evaluated, where SFI is a founding signatory of Plan S. SFI continuously collects data on this DORA aligned review and evaluation process, thus informing iterative improvements to this and related policy.—

By using the narrative CV, SFI is supporting global efforts to shift the culture of research assessment away from journal-based metrics and improving the way outputs of scientific research are viewed and evaluated.

Further information about how SFI are implementing DORA in our grant review process can be found [here](#).—

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SFI Industry RD&I Fellowship Programme

Science Foundation Ireland (SFI) is pleased to launch the Industry RD&I Fellowship Programme 2022 which seeks to support academia-industry interactions in order to address industry-informed challenges. Awards under this programme can be made to academic researchers (at faculty and postdoctoral level) wishing to spend time in industry worldwide through the temporary placement of academic researchers with an industry partner.

DEADLINE

Open
19th October 2022

DURATION

up to 2 years

[Click below for details:](#)

[Funding](#)

[Finding a partner](#)

[Gender Strategy](#)

[Key Dates](#)

[Webinar](#)

[Downloads](#)

[How to Apply](#)

CONTACT

SFI Industry RD&I Fellowship Programme

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e-Alert: February 2022

National Challenge Fund

The **National Challenge Fund** provides ambitious researchers the chance to make a difference by developing solutions to key challenges in the areas of Green Transition and Digital Transformation.

The National Challenge Fund is a **€65M research fund** that consists of eight challenges. In total, it aims to fund approximately 90 research teams with up to €250k over 18 months to develop their ideas. Under each challenge stream, a number of teams will then be awarded follow-on funding of up to €500k before going on to compete for prizes between €1- €2m.

The first challenges under the National Challenge Fund are the [2050 Challenge](#) and [Future Digital Challenge](#), which are now open to applications.

Challenge Funding is a solution-focused approach to research funding that uses prizes, phases, defined timelines, teamwork, mentorship, and competition to direct research activity towards addressing pressing societal and economic problems.

The National Challenge Fund encourages collaboration between government departments, agencies, enterprise, the academic research community, and societal stakeholders to identify challenges and enable action to address green transition and digitalisation targets set at government level. These partnerships will inform the expected outputs and outcomes to ensure that they are meaningful and relevant to the end user.

It is expected that solutions are inclusive, equitable and sustainable and adhere to the principles of responsible research and innovation.–

The National Challenge Fund was established under the Government's National Recovery and Resilience Plan (NRRP), funded by the EU's Recovery and Resilience Facility. The fund is coordinated and administered by Science Foundation Ireland.

Green Transition Challenges

Links below:

[2050 Challenge](#)

[A Healthy Environment for All Challenge](#)

[Energy Innovation Challenge](#)

Sustainable Communities Challenge

Future Food Systems Challenge

Digital Transformation Challenges

Links below:

Future Digital Challenge

Digital for Resilience Challenge

OurTech Challenge

Contact Us

If you would like to find out more about the National Challenge Fund, or explore opportunities to become involved, please contact Dr Stephen O'Driscoll (Digital Transformation Lead) or Dr Darragh O'Neill (Green Transition Lead) at challenges@sfi.ie.

The National Challenge Fund

Webinar and Q&A – 13 October, 10 a.m.

Join SFI Challenge Research Managers for a **Webinar and Q&A** on the National Challenge Fund on 13 October at 10 a.m. This webinar is aimed at researchers interested in applying to [2050 Challenge](#), the [Future Digital Challenge](#) as well as – [future calls](#) under the National Challenge Fund. SFI Challenge Leads will provide important information on the call and tips for your application, as well as answering your questions. Potential applicants are strongly recommended to attend and should register to attend at this [link](#). Please note that the same content will be covered as in the first webinar in September.–

Over the coming months, SFI will also be arranging a number of **regional workshops** to give researchers an opportunity to come together to discuss their ideas and receive feedback in a collaborative setting to support them in applying to the National Challenge Fund. Please contact your Research Office for more information on attending these events.

SFI welcome discussion with applicants if you are unsure about the suitability of your idea for a challenge call. If you would like to **book a short slot** to speak with one of the Challenge Leads, please contact your Research Office.

Register for Webinar:

[**Meeting Registration - Zoom**](#)



e-Alert: March 2022

SFI Discover Programme Science Week Call 2022

Science Foundation Ireland is pleased to launch the **SFI Discover Programme Science Week Call 2022**. The purpose of this call is to provide support to festivals and events nationwide that encourage people, in particular those underrepresented in STEM, or those with less access to STEM, to engage in ways that are relevant and accessible during **Science Week 2022** and beyond.

For more information and to apply, please visit:

[Science Week Call 2022](#)

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Taoiseach and Minister Harris launch Innovate for Ireland - a new initiative to recruit and retain talent

1st July 2022: Taoiseach Micheál Martin and Minister for Further and Higher Education, Research, Innovation and Science Simon Harris TD have today announced a new partnership between industry and the Government to recruit and retain talent in Ireland.

Innovate for Ireland is an important collaboration between industry and the Government of Ireland.

The initial phase of the Innovate for Ireland initiative will seek to attract up to 400 PhD high calibre students to undertake research in Ireland that tackles national and global grand challenges such as climate change and climate adaptation; global health and pandemics; water poverty; digital society; cyber-security).

An attractive package, including a stipend of €28,000, will be awarded through the programme to the PhD students. This has been benchmarked against similar scholarship programmes internationally.

The programme will embrace all relevant disciplines from Science, Technology and Engineering to Arts, Humanities and Social Sciences.

Speaking today, **Taoiseach Micheál Martin** said: “This Government has a deep commitment to research and innovation and to addressing global sustainability. We need more top-class researchers and innovators to make Ireland a leader in overcoming the grand challenges of our times.”

“That is what this programme Innovate for Ireland will achieve. It will ensure the best minds are advancing solutions here in Ireland and in so doing enhance our talent offering and our dynamic innovation ecosystem. I welcome the private sectors support for this initiative.”

Announcing the programme, **Minister Harris TD** said: “I am delighted to have the backing of the Government for this new initiative, Innovate for Ireland. It has great potential to transform Ireland’s talent pipeline.”

“Through partnership with the private sector, this collaboration will help us to ensure our brightest and best stay in Ireland but also that we continue to attract talent to Ireland. Today is an important step. A competitive call will now follow.”

“Innovate for Ireland aligns with strategic goals in the Governments Impact 2030 Strategy and my own Departments Strategy Statement 2021-2023. This programme will establish Ireland as a globally renowned hub of talent development and knowledge creation.”

Innovate for Ireland is an ambitious partnership between industry and government. Subject to matched funding by private investors, a multi-million euro investment will be made by the State over the course of a number of years. Further detailed work will be done with private collaborators.

The initiative will be open to Irish and international students.

The programme will be managed through Science Foundation Ireland, in partnership with the Irish Research Council and the Health Research Board. A competitive call process aimed at Higher Education Institutes is being developed and should be initiated later this year.

Professor Philip Nolan, Director General, Science Foundation Ireland said “We welcome this new partnership between government and industry to support the development of future skills and talent through excellent doctoral training. Science Foundation Ireland looks forward to collaborating with all partners to develop and deliver this ambitious programme.”

Dómhnaí Slattery, CEO of Avolon, who originally proposed the concept of Innovate for Ireland, said: “I am excited to welcome Government support for Innovate for Ireland. I strongly believe this will be a transformative initiative for this island, one that will not only establish Ireland as the destination of choice for world-class research students, who will focus primarily on the sustainability challenges the entire world faces, but it will also deliver a strong pipeline of workplace-ready innovators to our shores over the next decade.”

“Innovate for Ireland will hugely benefit both our economy and our society. This ambitious collaboration will place this island of scholars exactly where we need to be, and that is at the forefront of game-changing global innovation.”

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Minister Harris announces €28.5 million investment in emerging research talent

29th August 2022 – Minister for Further and Higher Education, Research, Innovation and Science Simon Harris today announced an investment of €28.5 million across 53 research projects to support Ireland's emerging research talent.

Announcing the new investment, **Minister for Further and Higher Education, Research, Innovation and Science Simon Harris, TD**, said: "I am thrilled to announce these exciting new research projects, which allow researchers to advance their work and further develop their careers towards becoming the next generation of research leaders in Ireland. It is important that we retain and support our emerging talent across all areas of research, from astronomy, cancer, economics, energy, to health and nutrition. Crucially, this fund focuses on the representation of female researchers in the higher education system. We want to continue to increase the number of females participating in research and funds like this are crucial to helping us achieving this."

Projects include:

- Identifying highly nutritious versions of Irish oats that will be resilient in the face of climate change.
- Gendered violence in the Irish South Asian community.
- External Shocks and Fiscal Sustainability.
- The Development of Writing in Early Ireland.
- Recovering documentary sources of the circumpolar north in the long nineteenth century.
- The impact of plastics on health.
- Understanding the evolution of cosmic dust and star formation using the James Webb Space Telescope.
- Novel sensors for measuring agricultural emissions.
- Advanced batteries for improved energy storage performance.

Commenting on the awards, **Dr Ruth Freeman, Director Science for Society, Science Foundation Ireland**, said "We are delighted to be able to provide this important support to early-career researchers, enabling them to gain the essential skills and experience to develop their track record and become independent research leaders. In partnership with the Irish Research Council, we have been able to support 53 projects, providing resources for excellent researchers and projects across a range of disciplines."

Dr Louise Callinan, Interim Director of the Irish Research Council, said "The IRC is committed to cultivating agile independent researchers and funding excellent research across all disciplines. Through this impactful partnership with Science Foundation Ireland, emerging research talent in both AHSS and STEM will be supported toward becoming established independent researchers and future research leaders." The projects are funded through the

SFI-IRC Pathway programme, a new collaborative initiative between Science Foundation Ireland (SFI) and the Irish Research Council (IRC) to support early career research across all disciplines and to encourage interdisciplinary approaches. Of the 53 projects supported under the first round of this new partnership programme, 36 projects will be supported in science, technology, engineering and maths

(STEM) and 17 will be supported in arts, humanities and social sciences (AHSS). The awards will enable postdoctoral researchers to conduct independent research for a four-year period and will provide funding for a postgraduate student who will be primarily supervised by the awardee.

A specific focus of the programme is increasing the representation of female researchers in the higher education system:

- STEM awards by gender –Female (21); Male (15).
- AHSS awards by gender – Male (9); Female (8).

The 53 research projects will be funded through 12 research bodies, as follows: Dublin City University (4); Dublin Institute for Advanced Studies (5); Marine Institute (1); Maynooth University (5); Munster Technology University (2); National University of Ireland, Galway (3); RCSI, University of Medicine and Health Sciences (1); Teagasc (1); Trinity College Dublin (8); University College Cork (6); University College Dublin (9) and University of Limerick (8).

View the full list of projects:

[List-of-funded-projects.pdf \(sfi.ie\)](#)

#BelieveInScience

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Minister Harris publishes more than 18,000 ideas generated from national brainstorm – Creating Our Future

Ideas to inspire future research projects in 16 areas from culture to sustainability, mental health and housing, identified by the public.

15th July 2022: Minister for Further and Higher Education, Research, Innovation and Science Simon Harris has today published the outcomes from Creating Our Future, a unique national brainstorm that received more than 18,000 ideas on how to create a better society.

The diverse breadth of public submissions on where research should be focused ranged from ideas on the environment, mental health, food and sustainable and green living, to housing, health, the arts, digital challenges, learning and development, and nurturing community.

The campaign asked the Irish public to submit research ideas based on a flexible, open-ended question: **‘Tell us your idea for what researchers in Ireland should explore to create a better future?’**

Some responses included:

- the impact of parental depression on children
- a zero-waste society
- a cut-off button on phones, tablets, laptops and computers for children
- the use of robots for litter collection
- car-free cities
- whether radio listeners respond to or engage differently with presenters who are men or women
- communication around cancer and infertility

Speaking today, **Minister Harris** said: “The Creating Our Future campaign was launched to bring research and the public together; to unite everyone in a shared project to allow us to better understand how research can work for the Irish public and shape a better Ireland.”

“We wanted to open a discussion to everyone, to discover what was important to people, to find out what they would like to explore to create a better future for all.”

“The campaign aimed to democratise research – everyone can have a good idea; the campaign was open to everyone, and I am glad to say that we received research ideas from every county in the country.

“The Expert Committee Report analysing the submissions paints a very interesting picture of the thoughts and concerns of the Irish public at a unique point in time. Their findings, alongside all the submissions, now form a valuable and unique digital book of inspiration.

“The database of ideas will serve as an enduring source of insight and will help to inspire future research in Ireland. I would like to sincerely thank each person that submitted an idea to the Creating Our Future campaign.

“In one way, it feels like we are at the finish of Creating Our Future but in another, we are really only at the beginning. The public has done its part, it is now up to Government and its agencies to implement the recommendations in both the Campaign Report and Expert Committee Report.

“The research ideas have already been aligned with a number of ongoing and upcoming programmes and will inform research through a variety of initiatives over the coming years.

“I would like to thank all of those involved, the Ambassadors, Advisory Forum Members and Members of the Expert Committee and Working Groups, and Science Foundation Ireland, it was through this combined effort that we have ultimate success.”

Creating Our Future was the first of its kind public engagement dialogue to be undertaken in Ireland. All 18,062 ideas submitted by the public during 2021 were considered by an independent Expert Committee and grouped under 16 thematic areas.

The outputs and recommendations from Creating Our Future are integrated into the Government’s new national research and innovation strategy [Impact 2030](#), and will inform the National Challenge Fund, as well as being aligned with future public engagement campaigns such as Science Week.

See links:

[Minister Harris publishes more than 18,000 ideas generated from national brainstorm – Creating Our Future \(sfi.ie\)](#)

[Creating Our Future » Reports and Data](#)

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SARS CoV-2 Virus Updates and Developments

June – September 2022

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A Tiny Change in Jab Strategy Might Reduce COVID-19 Vaccine Fatigue, Mouse Study Finds

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COVID-19 can cause metabolism problems by interfering with insulin signaling, study reveals

27 June

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3 July

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Increased Risk of Serious Blood Clots Up to Six Months After COVID-19

12 July

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12 July

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13 July

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Page 19979 to 20568

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IDA Updates & Reports

IDA Ireland half-year FDI results highest ever

6 July 2022

- Investment approvals strongest ever in half-year period - IDA IRELAND
- First half of 2022 shows Investments up 9% on 2021 and 10% on 2019 pre-pandemic levels
- Jobs approvals up 44% on 2021 figures and 33% above 2019 pre-pandemic levels
- Despite significant global economic headwinds, FDI continues to prove resilient in Ireland

Performance to end Q2 2022

- Investment numbers increased & Foreign Direct Investment (FDI) employment creation plans rose above pre-pandemic record levels (2019) in the first half of 2022
- Strong levels of investment by new and existing investors in Ireland
- Performance underlines the country's ongoing reputation as a competitive, stable and resilient place in which to do business
- 155 investments won up to the end of Q2 – 73 of them new name investments
- Associated employment potential of over 18,000 jobs
- Strong regional performance continued with 73 of the 155 investments going to regional locations

Outlook

- Global FDI entered 2022 with recovery momentum, however early indicators are that this uptick stalled during Q1 2022
- Global economy facing severe headwinds with the outlook dependent on the future trajectory of the Russia-Ukraine war, inflation, monetary policy and geopolitical developments
- Outlook for IDA H2 pipeline remains relatively positive despite difficult operating context

However, in a challenging external environment, a focus on ensuring Ireland has the immediate and medium-term absorptive capacity to support continued growth remains vital.

More details here: [Latest News](#) | [Press Releases](#) | [IDA Ireland](#)

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Diageo Announces Plans for €200 million investment in Carbon Neutral Brewery in Kildare

15 July 2022



Diageo today announced plans to invest €200 million in Ireland's first purpose-built carbon neutral brewery on a greenfield site in Littleconnell, Newbridge, Co. Kildare. The new facility will brew lagers and ales including Rockshore, Harp, Hop House 13, Smithwick's, Kilkenny and Carlsberg. When fully operational with a capacity of 2 million hectolitres, it will be the second largest brewing operation in Ireland after St. James's Gate and support the future growth of Diageo Ireland's beer brands.

The state-of-the-art brewery will be powered with 100% renewable energy and will harness the latest process technology to minimise overall energy and water consumption. This will enable the brewery to avoid up to 15,000 metric tons of carbon emissions annually.

As the production of lagers and ales is transferred to the new facility it will enable St James's Gate to increase the production of Guinness to meet global demand. Additionally, it will also support the delivery of Diageo's Society 2030 commitments by creating the physical space required for the use of renewable technologies at St James's Gate.

Tánaiste and Minister for Enterprise Trade & Employment Leo Varadkar TD, said "This €200m investment by Diageo is really great news for the future development of Ireland's thriving food and drink industry, and also for the wider national economy. It's also extremely positive for Newbridge and the local economy in Kildare, with up to 1,000 jobs being created during the construction of the site, and 50 once built. I'm sure there will be many indirect jobs too.

"We must leave the planet in a better way than we found it. Industry has a role to play and I'm really pleased to see Diageo taking the lead and investing in this carbon neutral brewery, which I'm sure will be a leading example for others."

Colin O'Brien, Category Head – Global Beer Supply, Diageo said, “Today is a landmark day for Diageo in Ireland. Our plans for a new, state-of-the-art brewery in Kildare, and the developments at St. James’s Gate, will enable growth in overall beer exports from Ireland.”

“We are fully committed to embedding sustainability across our business from grain to glass and this announcement represents the next step in our integrated approach towards achieving one of Diageo’s Society 2030: Spirit of Progress commitments by becoming carbon neutral in our direct operations.”

Leo Clancy, CEO of Enterprise Ireland, added “Diageo’s decision to invest in a second brewery in Ireland is a fantastic endorsement of the Irish food & drink ecosystem. Diageo is a key client of Enterprise Ireland, and we look forward to continuing to partner with them as they embark on this ambitious project to create Ireland’s first purpose-built carbon neutral brewery. The new facility will make an important contribution to the local economy, supporting value added exports, creating high quality jobs, and doing so in line with the highest sustainably standards.”

Martin Shanahan, CEO of IDA, said “IDA Ireland welcomes this proposed development in Kildare of Ireland’s first purpose-built carbon neutral brewery by Diageo, a substantial and valued employer in Ireland. This proposed investment demonstrates Diageo’s continued commitment to sustainability, which is also a key pillar of IDA Ireland’s current strategy Driving Recovery and Sustainable Growth 2021 – 2024.”

The new facility will contribute to Ireland’s critical economic and climate policy goals, such as supporting the transition to a low carbon economy while also increasing both food and drink production and associated jobs.

Diageo will submit a planning application to Kildare County Council in September this year and, if successful, plans to commence brewing in 2024 following a construction period of approximately two years.

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Tánaiste and IDA Ireland mark 40 years of Medtronic in Ireland, and significant growth in R&D jobs

15 July 2022



IDA Ireland, together with Tánaiste and Minister for Enterprise, Trade and Employment, Leo Varadkar attended a 40-year celebration at Medtronic's Parkmore facility in Galway today where 200 Research & Development roles were announced.

The 200 newly-announced jobs include significant growth in New Product Development and a new Global Laboratory Services team in Galway. In what is part of a \$30 million capital investment by Medtronic, recruitment is already underway with just over half of the roles filled to date.–

The projects are supported by the Government through IDA Ireland.

Speaking at today's event **the Tánaiste** said: "Medtronic came to Ireland in 1982 with plans to manufacture a small number of cardiovascular devices. Forty years later, the company now employs more than 4,000 people across five sites in Galway, Athlone and Dublin and with a further 200 new jobs announced, today for Galway, just over 50% of which are already filled. That is remarkable growth. Medtronic Ireland has been a leading light in Ireland's vibrant medtech sector and this latest growth underlines the company's dedication to our country. I'd like to thank the Medtronic's team for their continued commitment to Ireland and wish them all the best for the next forty years."

Since 1982 Medtronic has expanded its manufacturing presence to also include New Product Development, Sustaining and Process Engineering, Customer Innovation, Global Shared Services, and locates its corporate headquarters in Dublin 2.

IDA Head of Life Sciences Michael Lohan said: "Today's celebrations are an opportunity to look back and acknowledge the substantial impact that Medtronic has made through its presence in Galway, Athlone and Dublin but to equally look forward with promise at the vote of confidence the company has taken by investing and growing the New Product Development team and other services in Ireland. Medtronic's role

in nurturing and developing talent in science and engineering over four decades is something IDA Ireland deeply values and we are proud to support the growth in the company's Irish R&D activity."

Gerard Kilcommins, Vice President, Global Manufacturing, Vascular Therapies & Implants and Country Director, Campus Ireland at Medtronic concluded: "The 40-year anniversary is an important milestone to celebrate in Medtronic's Irish story. Our sites in Ireland have played a significant role in Medtronic's evolution from medical device manufacturer to a global leader in healthcare technology.

These roles will support the development of products and services in the coronary artery, heart valve and peripheral vascular disease, heart arrhythmia and pacing, hypertension and spinal injury areas. There will also be roles in the Chemical Analysis and Biocompatibility fields supporting a new Global Laboratory Services team.

Today we highlighted several impressive figures about our business in Ireland- our 4,000 strong workforce, an additional 200 R&D and Laboratory Services jobs and the 70 health conditions treated with our products and therapies. However, to Medtronic employees, the most important statistic is that what we do helps to transform the lives of two people every second around the world – all of our existing and newly announced roles play their part in delivering on this mission and purpose."

For information on open roles in Medtronic go to: <http://jobs.medtronic.com>

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Record €672m spent on Irish research projects last year

9 August 2022



Ireland's research organisations spent a record-breaking €672m on projects last year as industry engagement and collaboration continues.

That's according to new figures by Knowledge Transfer Ireland (KTI), the Irish body that connects businesses to publicly funded research opportunities.

KTI said the spending by universities, institutes of technology and other publicly funded research institutions is one-third higher than when it began collating research expenditure in 2013.

The figures also show that Irish companies continue to have a strong appetite for engaging with research, as they accounted for 80pc of R&D agreements last year.

SMEs lead the charge on collaborations, representing 66pc of the companies that engaged with Irish publicly funded research.

KTI said the growing research expenditure highlights the opportunities available for Irish and multinational businesses to engage with research. The organisation said businesses that engage with third-level R&D are shown to be more competitive than those that don't.

Minister of State at the Department of Enterprise, Trade and Employment Robert Troy, TD, said the figures demonstrate the "breadth of collaborative and entrepreneurial opportunities that exist".

"Innovation through research is shown to deliver real value to Irish companies and to better position them to compete effectively in global markets," Troy added. "The calibre of Irish research and the opportunities it presents to business in Ireland continues to be recognised globally."

More spin-outs and collaboration

KTI's survey found that spin-out companies from Irish universities, institutes of technology and other publicly funded research bodies grew last year, with 32 new spin-outs formed. This is a marginal increase from 2020, when [30 spin-outs were created](#).

There are currently 143 active spin-outs that are three or more years in existence, which employ a total of 1,218 people.

KTI also said five Irish spin-outs were acquired last year, yielding €4m in revenue to research performing organisations and showing the attractiveness of Irish spin-outs to external investment. This includes SilverCloud Health, a Trinity College Dublin spin-out that was [acquired by US telehealth company Amwell](#).

The figures show there was a 7.5pc increase in the number of live R&D projects with companies, and a 24pc increase in live R&D projects with industry and non-commercial entities. A total of 1,780 R&D projects with companies were live by the end of last year.

Enterprise Ireland's manager of disruptive technology, innovation and knowledge transfer, Imelda Lambkin, said the connection between Irish publicly funded research and enterprise is stronger than ever "despite the challenges of the last number of years."

"We are seeing a continued geographical spread of activity from businesses engaging with the third-level and other State-funded research organisations, and it's heartening to see the level of investment these institutions are putting into cutting-edge research which are shaping the ideas of tomorrow," Lambkin said.

KTI is an organisation that aims to maximise the applications of Government-funded research, technology and expertise by connecting these resources with businesses. It is funded by Enterprise Ireland with co-financing from the Irish Universities Association.

Leigh Mc Gowran

This article originally appeared on www.siliconrepublic.com and can be found at: <https://www.siliconrepublic.com/innovation/research-spending-ireland-kti>

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Newly opened Cork battery plant to help Ireland meet its climate targets

9 August

The ESB has partnered with international energy storage company Fluence as well as Irish companies Kirby Group and Powercomm Group to open a fast-acting battery plant in Co Cork.

The facility is located at a site in Aghada and is the first in a series of similar developments that will focus on helping Ireland meet its climate action targets by 2030. The ESB, which is Ireland's state-owned electricity company, [aims to be net-zero by 2040](#).

The Aghada plant will add 19MW (38MWh) of fast-acting energy storage to help provide grid stability and deliver more renewables on Ireland's electricity system.

The ESB has been working with Fluence, Limerick-based engineering company Kirby Group and Kildare engineering company Powercomm Group on the Aghada project, as well as other planned projects in Inchicore, South Wall and Poolbeg in Dublin.

Paddy Hayes, ESB chief executive, outlined how the projects will support ESB's net-zero 2040 target. "ESB's Aghada site has a longstanding history of innovation, and its variety of efficient gas generation technologies continue to play a crucial role for Ireland's electricity system."

"This is ESB's first battery project in Ireland – this and four other battery projects now in development by ESB will deliver 300MW of battery capacity within the next two years. These projects will support the delivery of a stable and cleaner electricity grid, which is set to be powered by 80pc renewable generation by 2030," he added.

The announcement represents a significant milestone for US-headquartered Fluence. The Aghada plant's opening brings the company's total battery-based energy storage projects deployed or contracted globally to almost 5,000MW. Paul McCusker, Fluence president of EMEA, said that the battery plant's opening demonstrates how "energy storage systems can successfully displace fossil fuel plants and offer Ireland low-carbon flexible capacity to balance the electricity network".

The project is built with the use of Fluence's Gridstack energy storage product that can respond within 150 milliseconds and provide up to two hours of discharge at full power.

Blathnaid O'Dea

This article originally appeared on www.siliconrepublic.com and can be found at: <https://www.siliconrepublic.com/machines/esb-cork-kirby-powercomm-renewables>

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Government and IDA Ireland welcome news that Abbott is to invest €440 million and create 1,000 new jobs with the establishment of a new greenfield manufacturing facility in Kilkenny and expansion of its operations in Donegal

12 August 2022

IDA Ireland, together with Taoiseach Micheal Martin and Tánaiste Leo Varadkar, today welcomed news that leading global healthcare company Abbott is to construct a new greenfield manufacturing facility in Kilkenny and further invest in its Donegal Diabetes Care site, representing a combined investment of €440 million and creating 1,000 jobs between the two sites.

The project is supported by the Irish Government through IDA Ireland.

The new 250,000 sq. ft. state-of-the-art manufacturing facility, which will be located on the IDA Business and Technology Park in Loughboy, Kilkenny, subject to planning permission, will give Abbott the capacity to substantially increase production of its FreeStyle Libre technology for people with diabetes.

Speaking about today's announcement, **Taoiseach Micheal Martin** said: "This new investment by Abbott in Donegal and Kilkenny is hugely welcome news, bringing up to 1,000 highly-skilled jobs and expanded Medtech manufacturing capacity.

Abbott has a long and successful history, first establishing operations in Ireland in 1946, and this new investment is a great vote of confidence in the workforce here, and in this country as a place to invest. I wish all the team at Abbott every continued success in its endeavours in the years to come."

Tánaiste and Minister for Enterprise, Trade and Employment Leo Varadkar said: "This is really fantastic news from Abbott. It's a real vote of confidence in Kilkenny and Donegal and what those counties have to offer. We are working hard every day to create job opportunities in every county in the country, investing in every region to create a welcoming environment for the kind of opportunities we are seeing here today. It's a major priority of mine as Minister for Enterprise, Trade and Employment. These 1,000 new jobs are a huge boost and really speak to the strength of Abbott's 5,000 existing staff here. We never take this investment for granted. Thank you to the Abbott team."

IDA Ireland Executive Director Mary Buckley said: "Abbott has had a longstanding presence in Ireland spanning over 75 years during which the company has made a substantial and valued contribution to regional economies. This significant and transformative investment in a new greenfield manufacturing facility in Kilkenny is fantastic news for the South East Region and for Ireland. It is also most welcome and demonstrates continued commitment to its Donegal site that it will benefit from further investment and new jobs as part of this investment and jobs announcement. IDA Ireland's strategy to win investment for regional locations across Ireland includes encouraging and supporting established companies to develop additional regional sites and this is a prime example of that. This new manufacturing facility will deliver a substantial boost to the economy of the South East. I wish the company continued success."

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MSD Ireland set to expand Carlow site

22 August



- MSD to begin construction on state-of-the-art facility at existing Carlow site
- 100 new highly skilled jobs created to support MSD's long-standing commitment and continued investment in Ireland

22nd August, 2022: MSD Ireland (tradename of Merck & Co., Inc., Rahway, N.J., USA (NYSE: MRK)), is today announcing the creation of over 100 new jobs in Carlow as part of the company's ongoing commitment to strengthening its manufacturing capabilities to meet increased global demand for MSD's medicines and vaccines. The announcement comes as the company begins construction of a new facility at its existing site following a successful planning application process with Carlow County Council. The new, state-of-the-art facility will be a first of its kind globally, focussing on the production of next generation oncology biologics. Currently employing almost 530 staff, MSD Carlow opened in 2008 as MSD's first vaccines facility outside of the US. Construction on the site and hiring for open positions will commence immediately, with the intention of starting the new manufacturing operations in 2025. The proposed facility will employ an additional 100 permanent staff in addition to the 700 roles created during construction. When operational, the new roles will include highly skilled jobs in quality, operations, engineering, supply chain and technical support.–

Marie Martin, Site Lead at MSD Carlow, said: "We are very excited to see our Carlow site continue to grow and develop. Since we first opened our doors in 2008, our site has become integral to MSD's global manufacturing operations, continuously punching above our weight to drive innovation to make a positive impact for people and patients, from MSD Carlow to the world.–

"The demand for MSD's range of vaccine and biologics products has continued to grow since 2008 and this new facility will play a pivotal role in ensuring we can continue to sustain future supply to meet medical needs. The talent and commitment of our team is unmatched in the industry and we're very proud to see our operations and our team continue to expand."

Mairead McCaul, Managing Director of MSD Ireland (Human Health) and Head of MSD Ireland country leadership team, said: “We are delighted to be able to announce this further expansion of MSD’s footprint in Ireland which comes on the back of a number of significant investments in our facilities across Ireland in recent years. MSD’s continued investment in Ireland is due to continued access to highly skilled employees as well as collaborative partnerships with Government and Third Level institutions.

“The decision to further invest in Carlow is a real testament to the talent of the current Carlow team and MSD Ireland’s wider employee base and reinforces MSD’s commitment to Ireland, further strengthening our 50-year legacy here. The construction of this additional facility will only add to our ability to be able to offer current and future employees a truly unique experience across our sites in Ireland, offering an opportunity to experience all elements of pharmaceutical and biotech manufacturing within Ireland while pursuing a purposeful career that helps make a difference to patients the world over.”

Tánaiste & Minister for Enterprise Trade & Employment, Leo Varadkar said: “MSD has played an incredibly important role in helping Ireland become a world leader in life sciences and already employs over 2,800 people here. Today’s announcement, that the company is creating a further 100 new jobs in its Carlow site, is another fantastic day in MSD’s 50-year history here. The Government is committed to creating good, long-term jobs in all parts of the country, working towards full employment where everyone who wants a job, has one, in the county of their choice. MSD has made a really significant contribution to that goal, with facilities in Tipperary, Cork, Meath, Carlow and Dublin. The very best of luck to the team with this latest expansion.”

Mary Buckley, Executive Director, IDA Ireland said: “MSD’s continued commitment to Ireland is most welcome. Investments such as this strengthens our country’s position as a global destination for manufacturing excellence in vaccines and biopharmaceuticals. Winning investment for regional locations across Ireland remains a key focus for IDA. This new state of the art facility, an expansion to MSD’s established Carlow site, demonstrates once again that the South East region is an attractive location for FDI. We look forward to continuing to support the MSD team in Carlow and across all its sites in Ireland.”

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NIBRT announces construction start for a new ADVANCED THERAPEUTICS facility at its Dublin site

13 September



- NIBRT, a global leader in biopharmaceutical manufacturing training and research, announces major extension project.
- Extension will enhance Ireland's global position in biopharma manufacturing and help attract new high value jobs in the new area of advanced therapeutics; which includes cell and gene therapies, mRNA-based therapies and other novel vaccines.–
- Tánaiste Leo Varadkar and Martin Shanahan, CEO of IDA Ireland officially launch construction of NIBRT's new state-of-the-art advanced therapeutics research and training facility.

The National Institute for Bioprocessing Research and Training (NIBRT) has commenced construction work on an ambitious expansion of its existing facility in Dublin, Ireland. This expansion will increase NIBRT's capacity and capability to conduct manufacturing-focused research and training in advanced therapeutics. Advanced therapeutics is a category of innovative biological medicines that includes cell therapies, gene therapies, mRNA and DNA-based therapies and vaccines, and other novel vaccines. Tánaiste Leo Varadkar and Martin Shanahan, CEO of IDA Ireland attended today's announcement at NIBRT's facility in Dublin. The construction of this extended facility is expected to be complete and the facility operational in the second quarter of 2023. The new facility will accommodate around twenty-five new researchers and training staff and will serve new and existing NIBRT clients by providing research solutions to manufacturing challenges and staff training in the manufacturing of these highly innovative and complex medicines.

This €21 million project is funded by the Irish Government through IDA Ireland and incorporates 1,800 m² of new space, including five research laboratories and state of the art training suites, into the existing NIBRT facility that will be dedicated to advanced therapeutics.

Tánaiste and Minister for Enterprise, Trade and Employment Leo Varadkar TD said “Ireland is fast becoming a world leader in advanced therapeutics, the really high value, highly skilled work involved in making new vaccines and new treatments for rare and devastating diseases.— In order to keep pace with what is always going to be a fast-developing area, we need to continuously invest in cutting-edge research and training for our workforce, so they can compete with the best on an international stage. So, I’m really happy to announce the start of this expansion today. The Government is investing €21m, which will give us five new research labs, two new training suites and accommodate 25 new researchers. The work being done here will make a real difference to thousands of people’s lives.”

Speaking at today’s announcement, **NIBRT CEO Darrin Morrissey** commented “The role of NIBRT is to help the growth and development of the biopharma manufacturing sector in Ireland by providing cutting edge training and research solutions. NIBRT intends to further enhance our current capability by becoming a leader in the pioneering and fast-evolving area of advanced therapies and vaccines. It is an immensely exciting time for NIBRT. With this expansion, we expect to deliver training for many more potential and newly-hired biopharma staff, as well as considerable growth in our research activities. This has the potential to rapidly enhance Ireland’s standing as a location of choice for advanced therapy and vaccine manufacturing.”

The Irish biopharma industry continues to go from strength-to-strength, with over twenty new biologics manufacturing facilities developed across Ireland over the last decade and in excess of €12 billion in capital investment. The sector now supports over 40,000 high quality jobs with a diverse range of new opportunities currently available with the world’s leading biopharma and biotech employers. Advanced therapeutics, also known as Advanced Therapy Medicinal Products (ATMPs), treat diseases at molecular level and represent a potential step-change in the personalisation of treatment and in the treatment outcomes. For example, cell therapy is a medical approach that aims to introduce new, healthy cells into a patient’s body to replace diseased or missing ones. While gene therapy treats or prevents disease by correcting the underlying genetic problem that causes the disease. Delivering these treatments to patients has the potential to offer tremendous therapeutic benefits, in some cases even a cure, in previously intractable illnesses like cancer, diabetes and neurological conditions. However, the manufacture of these highly sophisticated therapies is highly complex and producing them in a cost-effective and safe way presents unique challenges.—

Martin Shanahan, CEO IDA Ireland said “The expansion of NIBRT to respond to innovation in the sector greatly adds to Ireland’s reputation as a global location of excellence for next-generation biopharmaceutical products. IDA Ireland continues to partner with and support NIBRT to ensure that Ireland is well positioned to support companies in these emerging advanced therapeutic areas. Cell & Gene therapy is a core pillar in the developing field of Advanced Therapy Medicinal Products (ATMPs) which is widely considered as the next generation of pharmaceutical therapies. These products require highly innovative approaches to manufacturing and offer unparalleled opportunities in the treatment of disease.”

NIBRT has pulled together a team of global experts to develop the new facility, with PM Group having designed the extension, Sisk delivering the construction works and BPE Biopharma Engineering managing

the overall project. The new facility will be open in quarter 2 2023 and information on NIBRT's advanced therapeutic-related services and programmes can be located at <https://www.nibrt.ie/atmp/>

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Stryker advances its global additive manufacturing leadership with new facility at Anngrove

3 August



Stryker (NYSE: SYK), one of the world's leading medical technology companies, today celebrated the official opening of the high-tech facility at Anngrove with a visit from Taoiseach Micheál Martin TD, the IDA and other local guests. The new 156,000-square-foot development creates capacity for 600 high-tech jobs in the future, and will help further Stryker's leadership in additive manufacturing. Stryker has made significant investments in Anngrove to establish itself as a world leader in this technology, and will continue to invest for growth.

Welcoming the news, Taoiseach Micheál Martin TD said: "I am delighted to be at the opening of Stryker's newly expanded Anngrove facility, a very welcome development for Cork and the South West region. Today's opening and announcement of the capacity for new jobs is testament to the capability, dedication and vision of the Stryker team, and of the growth and success of Stryker here. Government will work to ensure Ireland continues to be an attractive location for the med-tech sector, and business in general, supported by our highly-skilled and talented workforce."

Stryker is a global leader in the application of additive manufacturing technologies, also known as 3D printing, to healthcare innovation, particularly for the manufacture of specialised medical devices. The company manufactures products to treat bone-related conditions across knees, hips, shoulder, ankle, craniomaxillo facial and spine, as well as patient-specific solutions for people with significant disease progression often with no alternative.

In addition to housing Stryker's manufacturing facilities, Anngrove is also the worldwide headquarters of the AMagine Institute, which is the centre of excellence for additive manufacturing across Stryker. The institute develops breakthrough technologies, from early research and development to full commercial launch and scaling, and deploys these new technologies across its full portfolio of products and services.

Announcing the news today, Viju Menon, Group President Global Quality and Operations at Stryker, said, “The new facility and talent will continue to unlock new opportunities that were previously not possible, accelerate innovation globally and further support our mission to make healthcare better together with our customers. With our experience and proprietary technology, we are excited to impact more patients and drive growth with this additional investment. We are also pleased to expand our talent base in Ireland with engaging roles across a range of disciplines. At Stryker we are committed to a diverse, safe and inclusive work environment.”

IDA Ireland CEO Martin Shanahan said: “Stryker has been innovating in additive manufacturing within the MedTech industry for more than 20 years and opened its Anngrove facility in 2016. The expanded facility furthers the company’s four-decade commitment to Ireland and recognises the strong ecosystem of universities, engineering talent and partners such as the IDA. It also builds on Stryker’s outstanding track record for innovation and shows the key role Anngrove plays in the company’s global additive technology research and development. We welcome this exciting development in Anngrove, the potential it brings for future high tech job growth, and look forward to continued success for Stryker in Ireland.”

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Ortec Inc. officially opens European headquarters in Co. Limerick

13 September 2022

Ortec, Inc., a leading supplier of custom formulation and manufacturing services to the life science industry, has officially opened its European Headquarters, Manufacturing and Operations Centre in Newcastle West, Co. Limerick.

This project is supported by the Irish Government through IDA Ireland.

Minister for the Office of Public Works Patrick O'Donovan TD said: *"This is one of the proudest days that Newcastle West has had in recent years. The arrival of Ortec, and the investment made by the Brotherton family from South Carolina, represents a massive vote of confidence in our town. I know that many people have worked hard over a long period of time to make this a reality. What started out as a journey led by local people, and supported by the Government through IDA Ireland and Limerick City & County Council has led to this great day for Newcastle West."*

The 26,000ft² facility is a dedicated cGMP manufacturing facility. In addition to product synthesis, other facility capabilities include USP/EP generated water, a full-service analytical laboratory, and an ISO 8/Class 100,000 Clean Room. The site is intended to be ISO 13485 certified and will operate under FDA/EMA guidelines for production of pharmaceutical, combination, and medical device materials.

"We are proud to call Newcastle West our new home", said **Christopher Brotherton, Ortec, Inc. President**. *"From the moment of our first visit we have been welcomed. Co. Limerick is a great place to do business. It has the right infrastructure, work ethic, and talent pool to compete anywhere in the world."*

The company has already begun hiring and will be recruiting for additional roles in production, laboratory, and maintenance starting in December. These positions will be listed through Collins McNicholas.

Eileen Sharpe, Global Head Growth Markets, Asia Pacific, Engineering Technologies & Green Economy, IDA Ireland said: *"The opening of Ortec Inc.'s European Headquarters here in Newcastle West is very good news for Co. Limerick and indeed the Mid-West region. IDA Ireland remains committed to its strategy of winning jobs and investment in regional location. I wish Ortec every success with this project."*

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Johnson & Johnson Vision announces €100m investment in Limerick

16 September



Johnson & Johnson Vision Care Ireland UC, a global leader in eye health and part of [Johnson & Johnson MedTech](#), today announced an expansion of its existing facility in Plassey, Limerick. The €100 million investment has the potential to create 80 new jobs and will support the company's ambition to redefine healthy sight for life for more people around the world.

The Johnson & Johnson Vision site in Limerick is one of the largest contact lens manufacturing facilities in the world. The investment will expand the facility's manufacturing capacity, with the installation of fully automated flexible manufacturing lines built with industry-leading technology. This will support the future growth of Johnson & Johnson Vision Care's ACUVUE® Astigmatism product family and deliver the company's future new product introduction pipeline. Construction is currently underway with production expected to commence in 2024.

Recruitment is currently underway across a range of roles including in Operations (Process and Production Technicians), Engineering (Manufacturing Engineers and Supervisors), and Quality (Lab Technicians and Engineers). To learn more about joining the Johnson & Johnson Vision team in Limerick visit www.careers.jnj.com.

Speaking at today's announcement, **Taoiseach Micheál Martin TD** said: *"The MedTech sector is a crucial part of the Irish economy, and the continued commitment shown by Johnson & Johnson Vision to do business here is most welcome. The work done at their Limerick facility has a profound impact on the lives of people all over the world, and I am delighted that this site continues to go from strength to strength."*

The Johnson & Johnson Vision site in Limerick plays a key role in the Johnson & Johnson Vision contact

lens business, supporting the production of the company's fastest-growing daily disposable lenses for global markets.

*“Our aspiration is to bring improved sight to people around the world through the research, development, and manufacturing of new medical device technologies”, said **John Lynch, Plant Leader, Johnson & Johnson Vision Care Ireland Unlimited Company.** “We have been in Limerick for more than 25 years and our success is testament to our talented workforce. We will hope to add 80 new roles as part of this announcement. It is an incredible opportunity to join a diverse workforce made up of the best and brightest minds, delivering cutting edge medical technologies that transform lives.”*

Chris Ewer, Vice President, E2E Supply Chain Leader, Johnson & Johnson Vision Care, Inc. said: *“Globally, at least 2.2 billion people have a vision impairment. With the growth of our manufacturing operations in Limerick and our strong supply chain network around the world, we look forward to supporting more patients and eye care professionals with the products they need where they need them. Our 25 years of experience working in Ireland is remarkable and the expansion of our site is proof of our commitment to helping more patients around the globe.”*

CEO of IDA Ireland, Martin Shanahan said: *“IDA Ireland welcomes this investment by Johnson & Johnson in its Vision Care facility in Limerick. This is a testament to the success of Johnson & Johnson Vision Care's operations in Ireland over the past 26 years. I wish them continued success in their operations and ongoing partnership with IDA Ireland.”*

The Limerick site has a strong track record in environmentally sustainable operations, and the facility is powered by electricity from 100 percent renewable sources, including wind generation from an onsite turbine. The site has been ISO 50001 certified since 2015 and this has helped deliver continued energy performance.

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MeiraGTx formally unveils industry-leading gene therapy manufacturing facility in Shannon

16 September

MeiraGTx Holdings Plc (NASDAQ: MGTX), a vertically integrated, clinical stage gene therapy company, will today formally unveil its GMP manufacturing facility in Shannon, with An Taoiseach, Micheál Martin TD, in attendance.

The facility, online since earlier this year and stretching over 150,000 square feet, is the first commercial-scale gene therapy manufacturing site in Ireland. The facility is unique in its scale and integrated capabilities. The site contains three facilities, one built to be flexible and scalable for viral vector production for clinical and commercial supply, in addition, a facility to manufacture plasmid DNA – the critical starting material for producing gene therapy products – and thirdly, a Quality Control (QC) hub performing advanced biochemical quality control testing for MeiraGTx clinical and commercial programmes.

The formal unveiling marks a critical step in MeiraGTx's mission to develop and deliver potentially curative treatments for patients living with serious diseases. The Shannon site allows MeiraGTx to accelerate the development and delivery of gene therapy treatments to patients facing a wide range of both genetic and non-hereditary disorders – ranging from inherited vision loss, salivary-gland conditions, and neurological diseases such as Parkinson's, to potentially diabetes, obesity, and some cancers.

By building end-to-end gene therapy development, testing and manufacturing capabilities in-house, MeiraGTx has put in place the infrastructure and technology required to avoid bottlenecks in clinical development, reduce regulatory risk, and ensure the highest quality products for patients – all while lowering costs. The facility will also allow MeiraGTx the ability to provide manufacturing services to potential collaborators, helping to lessen the impact of industry-wide shortages of vital elements such as plasmid DNA and quality control services.

The facility, which is set to employ 100 people in its current phase, with the potential for that to increase to over 300, has been sited in Shannon due to its proximity to a number of world-class bioscience institutions, as well as partner companies in the healthcare sector. MeiraGTx is proud to have collaborated with The University of Limerick and the National Institute for Bioprocessing Research and Training (NIBRT) on skills and capability development and looks forward to building ever-closer relationships with other leading institutions across Ireland.

During the unveiling today, An Taoiseach will meet senior leaders from MeiraGTx, undertake a walking tour of the facility and make a short address to invited guests.

An Taoiseach, Micheál Martin TD, said:

“Today is an important day for MeiraGTx in Ireland, as we mark the formal unveiling of their state-of-the-art manufacturing facility. Great strides are being made in the area of gene therapy and I’ve no doubt

that these new facilities will allow MeiraGTx to remain at the forefront of that development. Today's unveiling is testament to the company's continued commitment to Shannon and the Mid-West and speaks to the considerable skills and ability of the Irish workforce."

Zandy Forbes, President and Chief Executive Officer of MeiraGTx, said:

"MeiraGTx's Shannon facility is unique, not only in Ireland but globally, as it streamlines gene therapy development, testing and manufacturing capabilities together in-house. This significantly reduces the time to patients for advanced therapeutic products, with months or potentially years saved. Along with our other facilities in New York, London and Amsterdam, the Shannon site will scale up and manufacture a broad range of gene therapies for people living with a variety of serious conditions."

Alastair Leighton, Senior Vice President of Manufacturing and Supply Chain at MeiraGTx, said:

"The COVID-19 pandemic has placed a strain on the global gene therapy industry to manufacture critical components, as well as exposed the shortcomings in the supply chain. While vaccines are not gene therapies, they share many of the same manufacturing processes and resources. The Shannon facility has been designed to address these challenges in order to provide access to transformative potential medicines to patients as well as be ready for significant future expansion."

CEO of IDA Ireland Martin Shanahan said:

"In 2020, MeiraGTx announced its intention to locate this globally unique GMP manufacturing facility in Shannon. So, it's terrific that two years later we can celebrate this official unveiling. IDA Ireland remains committed to winning jobs and investments across the country and MeiraGTx's decision to locate in the Mid-West demonstrates the region's reputation as a key location for the next generation of biopharmaceutical manufacturers."

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AbbVie announces a €60 million expansion as company's Cork facility marks 20th anniversary

21 September 2022



AbbVie (NYSE: ABBV), a global research and development-based biopharmaceutical company with a significant presence across eight Irish locations, today announced a €60 million investment at its manufacturing site in Cork.

The expansion, which will include the development of a new state-of-the-art facility, will create approximately 70 new jobs. New technologies will be introduced to the site in Carrigtwohill which will allow it to support AbbVie's aesthetics business.

AbbVie will also leverage the expansion to introduce new technology and upgrades that will improve the carbon footprint of the wider Cork site.

Construction will commence in 2023 with manufacturing operations scheduled to begin in 2025. In addition to the multimillion-euro investment announced today, AbbVie is also embarking on a three-year strategic training programme at the Carrigtwohill facility. The initiative is supported by the Government through the IDA and will enhance and develop key workforce skills to support incoming new technologies.

The Carrigtwohill plant celebrates its 20th anniversary in November and currently employs approximately 150 people. The €60 million announcement brings AbbVie's total investment at the location since the company's inception in 2013 to approximately €177 million.

Tánaiste and Minister for Enterprise, Trade and Employment, Leo Varadkar, said: “This multi-million investment by AbbVie is brilliant news. It’s a fantastic opportunity for Cork with the creation of 70 high value jobs in Carrigtwohill. AbbVie has been in Ireland since 1974, and now has eight locations across the country. Ireland is a world hub for life sciences and we’ve worked hard to create a welcoming environment for companies. This investment will reduce the carbon footprint at the Cork site and is setting a good example for the broader sector. I thank AbbVie for its continued investment in our country, and I wish the team all the very best with this expansion.”

“AbbVie traces its heritage in Ireland back to 1974 and is a company with a very strong presence all around the country. It is helping create high-quality career opportunities here in Cork, and has plants and office hubs in Dublin, but AbbVie also successfully manufactures innovative medicines for global supply at locations far from traditional pharma hubs on the west coast of Ireland, at Westport in County Mayo and in Sligo.

“It is great news to see a Cork plant that is already celebrating its 20th anniversary further enhance its capability and potential within the AbbVie Irish and global network through the imminent addition of new technologies and skills.”

Commenting on the announcement **Malcolm Garde, Site Director, AbbVie Cork**, said: “This latest investment is a fantastic opportunity for the Cork site and a recognition of the expertise and commitment of our dedicated employees over the past 20 years. The expansion and associated cutting-edge technologies will help us to further develop our employees and attract new skilled talent.”

IDA Ireland CEO Martin Shanahan said: “This latest investment by AbbVie is testament to Ireland being an attractive and supportive location for continued investment by established companies. Marking two decades of successful operations at its manufacturing site in Carrigtwohill by making a further €60 million investment, creating 70 additional jobs, is a strong endorsement and demonstrates a clear commitment to the company’s Cork site.

It’s a very significant day for a plant that already has a long and proud record of pharmaceutical manufacturing and innovation. IDA Ireland is delighted to partner with AbbVie in creating these opportunities for new employees who will help write the next chapter in its story.”

The 70 new roles will be spread across various areas including sterile manufacturing, quality control, and engineering. To explore opportunities to join the AbbVie team in Carrigtwohill, visit <https://careers.abbvie.com/en>

AbbVie employs approximately 2,600 people at seven other locations across Ireland including Sligo, Mayo, and Dublin. The company has been recognised as one of the Best Large Workplaces in Ireland for the past nine years and was named as a Best Workplace for Women earlier this year. AbbVie was also named ‘Biopharma Company of the Year’ at the most recent Irish Pharma Industry Awards.

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Enterprise Ireland Updates & Reports

Enterprise Ireland launches Gael Offshore Network at Offshore Wind Forum

8 June



Pictured left to right: Darragh Cotter, Enterprise Ireland; John Casserly, SSE Renewables; Richard Eakin, ScottishPower Renewables; Benj Sykes, Ørsted; Isla Robb, EC20; Liam Leahy, Fred Olsen Seawind; Gary Connolly, ESB.

Enterprise Ireland has today formally launched the Gael Offshore Network at its second *Offshore Wind Forum* at Croke Park. The Gael Offshore Network has been established to bring together and grow expertise in Offshore Wind in Ireland. The cluster is made up of over 65 member companies.

Launched by Enterprise Ireland CEO, Leo Clancy, Gael Offshore Network member companies have expertise in areas including civil and marine engineering, geotechnical/geophysical capability, materials handling, environmental surveys and data collection, along with an innovative expertise in digital for offshore and associated cybersecurity.

The formation of the Gael Offshore Network is in recognition of the economic opportunities available to Irish companies in the offshore wind sector, as well as the climate imperatives to move to renewable energy.

The Offshore Wind Forum

The Offshore Wind Forum sees over 200 attendees from the Irish and UK offshore wind sector gathering for the two-day event at Croke Park. The event provides Irish companies the opportunity to hear from and meet with international developers including Ørsted, SSE Renewables, ESB and RWE as well as with a range of established top tier contractors with a large global footprint in offshore wind.

The two-day event will also feature Irish SMEs showcasing their innovative capabilities and industry experience through a series of elevator pitches. Gael Offshore Network member companies have already secured several high value contracts, in the UK and other markets globally.

The UK is a key market for Irish companies on the offshore wind supply chain. The UK's 2030 50-Gigawatt (GW) ambition represents a major opportunity for Irish companies. The opening day of the Enterprise Ireland hosted event will examine the opportunity that exists in the UK with high level industry speakers taking a close look at the UK's industry ambition, investment, project pipelines and supply chain requirements.

The second day of the Offshore Wind Forum will focus on the Irish market with a keynote from Wind Energy Ireland. As domestic opportunities are beginning to emerge, attendees will receive updates on Ireland's project timelines, locations, and procurement routes. The government's Climate Action Plan outlines its ambition to produce 5GW of offshore wind energy by 2030.

Commenting on the event, Leo Clancy, CEO of Enterprise Ireland, said, *"I am delighted to launch the Gael Offshore Network at Enterprise Ireland's Offshore Wind Forum. There are significant growth opportunities for Irish companies in the offshore wind space. Irish companies have the innovative products and services to access the major opportunity that is evident in the UK but also at home in Ireland and further afield. The knowledge sharing and networking with global industry representatives at events such as this will help Irish companies to tap into current and future opportunities".*

To further position Irish companies to succeed in the UK market, Enterprise Ireland and the Gael Offshore Network will be hosting an Irish pavilion with some of its leading member companies at Global Offshore Wind 2022 in Manchester later this month.

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Irish Distillers announces plans for Midleton Distillery to become carbon neutral by 2026, using break-through emissions reducing technology



13 June

- Irish Distillers to invest €50 million over the next 4 years to fund projects aimed at transforming Midleton Distillery into a carbon neutral operation by the end of 2026
- This commitment represents the largest-ever investment by an Irish distillery in pursuit of a carbon neutral ambition, putting Midleton Distillery on track to become Ireland's first and largest carbon neutral distillery
- Part of the carbon neutral roadmap for Midleton Distillery will benefit from grant aid provided by Enterprise Ireland
- The carbon neutral roadmap is the latest step in Irish Distillers' sustainability strategy and is in line with the Pernod Ricard Group commitment to follow a Net Zero trajectory by 2050

Irish Distillers has today announced that it will invest €50 million in Midleton Distillery over the next four years to deliver a carbon neutral operation by the end of 2026. This is the largest investment made by an Irish distillery to date in pursuit of this ambition, putting Midleton Distillery on track to become Ireland's first and largest carbon neutral distillery.

The ambitious plan to eliminate scope 1 and scope 2 carbon emissions by the end of 2026 will involve the execution of a roadmap comprising several ground-breaking projects which will see Midleton Distillery entirely phase out the use of fossil fuels to power its operation.

The carbon neutral roadmap for Midleton Distillery will involve the roll out of several projects aimed firstly at reducing overall energy use by improving on-site energy generation efficiency and recycling waste heat in the distillation process. In time, the distillery's remaining energy requirements will be fulfilled by generating power from renewable sources.

As part of the initial phases of the roadmap, Irish Distillers has invested in highly efficient boilers which will require less fuel to operate. To deliver subsequent phases of the roadmap, Irish Distillers is working with global experts and partners on innovative Mechanical Vapor Recompression (MVR) technology which will see a closed looped system capture, compress and recycle waste heat in the distilling process.

This the first time this technology has been used across multiple batch processes in distilling.

The first three phases of the roadmap alone are expected to reduce emissions by up to 70 per cent .

The final phases will see the introduction of renewable sources of energy, including green hydrogen and biogas to power the distillery and close the door on natural gas usage. To achieve this, Irish Distillers has partnered with local experts at EI-H2 to explore opportunities to source sustainable renewable hydrogen.

Irish Distillers has also carried out extensive research in partnership with MaREI, the SFI Research Centre for Energy, Climate and Marine, hosted by University College Cork, to determine the biomethane potential of the by-products of distillation and design the required anaerobic digestion process necessary to produce biogas.

Regarding its wider value and supply chain, Irish Distillers has recently completed a mapping exercise of its entire carbon footprint. Based on this data and insights gathered, Irish Distillers has committed to working with suppliers on projects and initiatives to reduce scope 3 emissions across all areas of its business including raw materials, dry goods, transportation, logistics and freight.

Speaking about the launch of the project at Midleton Distillery, An Tánaiste, Leo Varadkar TD, said: *“Congratulations to the entire Irish Distillers team for blazing a trail, investing an incredible €50m to become Ireland’s first carbon neutral distillery by 2026. We need to take better care of our planet. Enterprise has a role to play, not just in reducing emissions that come directly from their operations, but by innovating and creating new products and ways of doing things that will help us make the changes that are needed. Companies, like Irish Distillers, who are committing to such bold and transformational change, will lead the way for many other similar businesses and I commend the team for their ambition and commitment.”*

Commenting on the announcement, Conor McQuaid, CEO and Chairman said: *“Today is a hugely significant day for Irish Distillers as we announce our ambition for Midleton Distillery to become the first and largest carbon neutral distillery in Ireland by 2026. This announcement is reflective of our commitment and ambition to reduce our environmental impact. We understand that our long-term future depends on reducing our reliance on fossil fuels. This plan was many years in the making, and we understand that there are many more years ahead to reach our goal. However, we are confident that by making this bold and brave move into the future, we will leave fossil fuels behind for good. Through the delivery of this plan, we hope to play our part in supporting Ireland’s decarbonising strategy while also aligning with Pernod Ricard’s commitment to follow a Net Zero trajectory by 2050.”*

Leo Clancy, Enterprise Ireland CEO, said: *“Supporting Irish companies to reduce their carbon footprint is a key strategic priority for Enterprise Ireland. Enterprise Ireland is proud to partner with Irish Distillers to support the roll out of an ambitious roadmap which will see Midleton Distillery become the first and largest carbon neutral distillery in Ireland by 2026. Distilling is an energy intensive process and Irish Distillers is committed to significantly reducing emissions and making a positive environmental impact across all areas of their business. Their plans to leverage break-through emissions reducing technologies will in turn provide a blueprint for the industry and other distilleries in Ireland.”*

Commenting on the announcement, Tommy Keane, Operations Director at Irish Distillers, said: *“With the climate crisis at a critical juncture, Irish Distillers is committed to reducing our environmental impact across our entire value chain and an area that we cannot ignore is how we power our distillery. While the technical challenges the team face in transforming our operations at Midleton Distillery to become carbon neutral are considerable, we believe that with the help and support of our partners at home and across the globe, this is possible. We are committed to doing the right thing for our industry, people, and communities. Together, we can make a real impact.”*

Global Healthcare Forum Focuses On Talent and Innovation In Irish Life Sciences



14 June Leo Clancy (CEO, Enterprise Ireland), Claire Brock (MC), Chris Coburn (Keynote Speaker).

- **130 global healthcare executives from 22 countries in Dublin for Global Healthcare Forum**
- **Enterprise Ireland is hosting this three-day event, which will be attended by 77 Irish life sciences companies**

A major international healthcare forum, which will see leading global executives from 22 countries across the world meet with Irish innovators, kicks off this morning in the Aviva Stadium in Dublin.

Hosted by Enterprise Ireland, the three-day Global Healthcare Forum will see more than 130 leading global executives from across 22 countries, from both the public and private sector, discuss the future of healthcare and meet with 77 of Ireland's life science innovators.

The conference provides an opportunity for international healthcare systems to discuss what comes next after the pandemic and the role of innovation in improving patient outcomes. The healthcare system in various global locations will be profiled. This is a unique opportunity for Irish companies to understand the challenges currently faced by healthcare systems across the world and the opportunities they may have to partner now and into the future.

Speakers at today's conference includes;

Chris Coburn, Chief Innovation Officer with Mass General Brigham, the largest healthcare provider in Massachusetts and one of the largest hospital-based research organisations in the USA with an annual research budget of nearly \$2 billion.

Professor Yvonne Doyle, Medical Director, NHS Public Health. Yvonne has acted as Statutory Adviser to two Mayors of London. She qualified as a doctor and has worked for over 30 years in senior roles in the NHS and the UK Department of Health, and in the academic and independent sectors.

Dr. Tad Funahashi, Chief Innovation & Transformation Officer, Kaiser Permanent, one of the largest non-profit healthcare providers in the US, with more than 12 million members.

Dr. Ibtesam Al Bastaki, Director of Healthcare Investment & PPP Projects, Dubai Health Authority that has the mission of transforming Dubai into a leading healthcare destination by fostering innovative and integrated care models and by enhancing community engagement.

Daniela Hommel, Chief Financial Officer and Innovation & Strategy Executive, Helios Global Health GmbH, Europe's largest healthcare provider with acute care facilities in Germany, Spain and Latin America.

Dr. Prem Kumar Nair, CEO, IHH Healthcare Singapore, one of the world's largest healthcare networks, with 80 hospitals in 10 countries including Malaysia, Turkey and Singapore.

Speaking in advance of the event, **Tánaiste and Minister for Enterprise, Trade and Employment, Leo Varadkar TD**, said: "This Forum is a great opportunity for global healthcare leaders to meet in Ireland and discuss the future of patient care and innovative new treatments. It will also be a good opportunity for global healthcare leaders to see our vibrant Irish Life Sciences sector at first hand. The Life Sciences ecosystem brings together medical institutions, third-level research and entrepreneurs, and is producing cutting-edge innovation to make a real difference to patients across the globe. It's also a power-house for job creation and a vital part of the Irish economy."

Leo Clancy, CEO, Enterprise Ireland, said: "Enterprise Ireland is proud to bring this important Global Healthcare Forum to Ireland. Our Life Sciences sector has a global reputation for innovation and quality and this three-day event will allow over 70 Irish companies to showcase their innovation and research plans to over 130 leading global healthcare executives. It is an important event, demonstrating international recognition of the strength of this sector in Ireland and its central role in tackling global healthcare challenges and working towards improving patient outcomes."

Following today's conference, attendees will spend the next two days meeting healthcare providers, innovators and entrepreneurs to discuss the future of healthcare in Ireland and globally, and to see the difference that Irish life science companies are making.

On Wednesday (15th June) the group will be in Galway and Offaly, and the itinerary includes a tour of Tullamore Hospital, led by the HSE's Digital Transformation Unit, and meetings with key stakeholders in the Irish healthcare innovation ecosystem. This includes Atlantic Technological University's Innovation Hub (iHub), BioInnovate, Health Innovation Hub Ireland, and a site tour of Enterprise Ireland supported company Aerogen which specialises in aerosol drug delivery.

On Thursday, the group will visit St. James's Hospital, Dublin, with the focus on its digital health innovation. They will also meet with senior leadership from innovation hubs based in Dublin, hosted by the Guinness Enterprise Centre, and tour Enterprise Ireland supported companies HealthBeacon and Trulife.

On both days Irish life sciences companies will have an opportunity to showcase and pitch their innovation offering to the visiting delegates.

ENDS

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Novus Diagnostics is awarded mentorship at Roche Diagnostics and Enterprise Ireland Incubator Programme Event 2022



Pictured (l-r): Finbarr Kenny, Director of Ireland, Roche Diagnostics; Leo Clancy, CEO, Enterprise Ireland; Keith O'Neill, CEO, Novus Diagnostics; Kellie Adamson, Chief Scientific Officer, Novus Diagnostics; Alan Hobbs, High Potential Start-Up Manager for Life Sciences, Enterprise Ireland.

21 June

Four Irish start-ups and university spin-offs showcase innovations in disruptive diagnostic technologies

Novus Diagnostics has been awarded a 12-week mentorship with Roche Diagnostics, as part of the Roche Diagnostics and Enterprise Ireland Incubator Programme 2022.

The aim of the programme is to support Irish-owned and headquartered start-ups, SMEs and university spin-outs that are creating disruptive diagnostic technologies. Launched in April, the 2022 programme sought applications from organisations that are developing healthcare solutions that will impact patient care in the field of diagnostics.

At a pitch event, which took place at Enterprise Ireland Head Office in Dublin, Novus Diagnostics was selected as the recipient of a bespoke mentorship programme with Roche Diagnostics. As a multinational and leader in the field of diagnostics, Roche will provide Novus Diagnostics with access to experts across its organisation and across geographies. The mentorship programme will include support and advice on business model development, including health economics and how to accelerate as a start-up, access to regulatory experts, and advice from sales and marketing teams on how to commercialise innovations. Four Irish start-ups pitched in this year's Incubator Programme, showcasing a range of solutions and innovations, all of which are aimed at improving patient outcomes.

Commenting at the event, Finbarr Kenny, Director of Ireland at Roche Diagnostics

said, "Supporting local Irish enterprises is a key element of our ongoing commitment to delivering best-in-class diagnostics for the patients of Ireland. We were delighted to meet with Irish start-ups who share our passion for improving patient care through diagnostics innovation and disruptive technologies, and Roche Diagnostics is proud to work with Enterprise Ireland in developing this platform for collaboration. Based on the candidates we have seen, we can all be excited and confident that the evolving future of

diagnostics development is assured, unlocking Ireland's potential to be a global leader in healthcare innovation."

Alan Hobbs, High Potential Start-Up Manager for Life Sciences with Enterprise Ireland,

said, "Programmes such as the Roche Diagnostics and Enterprise Ireland Incubator Programme have huge value, as they help start-ups to gain the support and knowledge they need to commercialise their solutions and scale globally. We are grateful to Roche Diagnostics for their ongoing commitment to the Irish start-up ecosystem, working together with us at Enterprise Ireland to support the Irish innovators that will help to shape the future of healthcare globally through the development of world-class diagnostic solutions."

The start-ups pitching at the event included:

- **Atturos:** Atturos is a fast-growing clinical diagnostics company developing the next generation of molecular diagnostic tests which support clinicians in making the best treatment decisions for patients. Based on excellent science, with patient wellbeing at its core, Atturos is developing cutting-edge diagnostic tests based on advanced targeted proteomics methods and machine learning analytics. The pipeline currently includes tests for inflammatory arthritis, prostate cancer and diabetic kidney disease. Atturos tests provide easy to interpret scores to help clinicians and patients to make the best decisions they can providing for improved patient outcomes and treatment plans.
- **EpiCapture:** EpiCapture is a UCD spin-out developing liquid biopsy tests for early cancer detection. The team is led by Dr Antoinette Perry, whose research passion is translational cancer epigenetics. The initial focus is on prostate and ovarian cancers.
- **identifyHer:** identifyHer is a digital health company using wearable enabled AI to guide the diagnosis and management of perimenopause, bridging the gap between symptomatic women needing treatment and the difficulty for clinicians diagnosing perimenopause. The wearable sensor and AI platform is a first-of-its-kind menopausal symptom detector that will provide unique objective data on the frequency and severity of symptoms, acting as a companion diagnostic for clinicians. This will enable them to diagnose perimenopause earlier, personalise the management of symptoms and track treatment efficiency; reducing the number of years women suffer with symptoms and allowing them to live healthier and more productive lives.
- **Novus Diagnostics:** Novus Diagnostics is a Dublin based company developing a revolutionary new clinical diagnostics technology. The company's first product is a rapid bedside test for Sepsis. Sepsis kills more than 11 million people around the world every year. While many of these lives could be saved through earlier intervention with effective antibiotics, current tests take hours or days to deliver results. Novus Diagnostics' product, SepTec, will bring diagnostic testing right to the patient's bedside and deliver definitive results within minutes. This means the physician can immediately prescribe a more targeted treatment regime for each individual patient – leading to better patient outcomes, and saving lives.

About Roche Diagnostics

Roche Diagnostics is a multinational company that develops and manufactures in vitro diagnostics solutions to help support clinical decision-making and transform the lives of patients. We are defined by the power of our scientific and technological capabilities around the world. Our global network of scientific excellence allows us to introduce and integrate breakthroughs in diagnostic science from across the world into healthcare systems with speed, accuracy and precision. Our portfolio of diagnostic solutions is vast and we are continually innovating. We have over 120 years of history and a track record of innovation and excellence around the world and within the UK and Ireland.

ENDS

For further information, please contact:

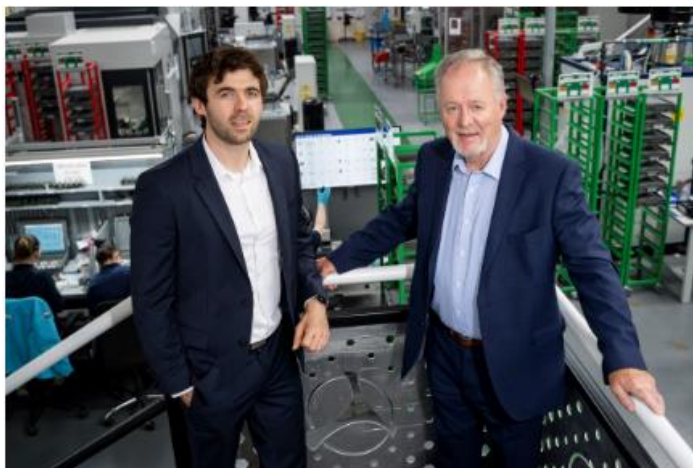
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Enterprise Ireland

[Theresa Quinn](#)

County Limerick based medical device company experiencing rapid growth – announces 80 new jobs this year



30 June

Employee numbers on target have risen almost four-fold in just 18 months (going from approx. 45 – approx. 170 employees in 18 months)

Croom Medical, a medical device manufacturing business which manufactures orthopedic medical implants for a series of blue chip multinational companies today opens a new multi-million euro manufacturing facility in its home town of Croom, County Limerick. The company has invested over €12 million in the new facility. The company has also announced plans to develop a further manufacturing facility in the area which is expected to open in 2023.

The company also confirmed that it is on course to recruit an additional 80 team members this year with more expected in 2023. Just a year ago (July 2021) the company employed 45 people but that number is on target to rise to 170 by the end of this year as it scales up its operations in response to rapidly growing demand.

The opening of the new facility today will be attended by Minister Niall Collins, Minister Patrick O'Donovan, Tom Kelly, Head of Cleantech, Electronics and Life Sciences at of Enterprise Ireland, staff of Croom Medical and representatives of key clients.

Croom Medical was set up by Paddy Byrnes in 1984 and focuses on the machining and handling of precious metals for use in a sterile environment. The company is now led by CEO, Patrick Byrnes (son of the founder) who joined in 2018.

Croom Medical CEO Patrick Byrnes said that the company has experienced rapid growth on the back of significant investment in research, development and innovation in medical device manufacturing technologies over the past four of years. He said: *“Our state of the art facility hosts some of the most advanced manufacturing technologies in Ireland. We have made a number of strategic investments in Additive Manufacturing (3D Printing), Advanced Machining Centers and Automation. Our team is looking forward to increasing our footprint to facilitate 80 new high value roles in order to meet customer demand on a global level.”*

The company is located close to a hub of global medical device manufacturers who have significant operations located in the South and West of Ireland. The company has longstanding relationships with a number of these international players including several household names in the MedTech sector.

In 2020, Ireland's leading Growth Capital Investor, BGF, announced a multi-million investment in a minority position in the company. Enterprise Ireland is also a shareholder in the business. At the time of the BGF investment, **Michael Maher**, former Chief Operating Officer of Glen Dimplex, was appointed as Non-Executive Chairman. Mr. Maher was a co-investor alongside BGF in that year's capital raise.

Minister Niall Collins said *"This is a superb business which is a wonderful tribute to the Byrnes family and to the hard work which Paddy and now Patrick and the team have put in to grow the business from humble beginnings to an significant presence in a vital part of the international healthcare sector."*

Minister Patrick O'Donovan said; *"Croom Medical is achieving rapid growth because of the excellence of its products and services and the investment which it has made in its own business through the years. It's wonderful to mark the success of this Limerick enterprise and to hear them talk already of further growth to come in the years ahead. "*

Tom Kelly, Divisional Manager - Industrial and Life Sciences at Enterprise Ireland said: *"Croom Medical is an excellent example of an Irish company that has successfully implemented an agreed growth action plan while meeting the multifaceted needs of its customers across the world, and willing to bring in external growth capital to drive this plan. Enterprise Ireland is delighted to have supported Croom Medical along its growth trajectory, and we are proud to support the company with its ambitious expansion plans announced today which will create 80 high value new jobs in Limerick."*

ENDS

Press Office, Enterprise Ireland

Enterprise Ireland ranked as Europe's most active domestic venture capital investor by PitchBook



5 September

A new report by PitchBook, a leading Venture Capital (VC) and Private Equity investment platform, has named Enterprise Ireland as Europe's most active domestic VC investor by deal count.

The report, which covers the period 2018 to H1 2022, showed that Enterprise Ireland had completed 988 investments over that period, the most in any European country.

The number of investments completed by Enterprise Ireland was 42% more than its nearest competitor, French sovereign wealth fund Bpifrance.

Welcoming the PitchBook report, **Leo McAdams, Head of Investment Services at Enterprise Ireland**, said:

“Enterprise Ireland is committed to ensuring that Irish companies, especially those in the start-up sector, have access to capital to enable them scale and grow in competitive global markets. The latest PitchBook report demonstrates our activity in this important area and we are delighted to be ranked first in Europe by deal count. This investment by Enterprise Ireland assists dynamic, innovative companies that create jobs throughout Ireland and play a huge role in local economies and communities.”

The PitchBook platform is used by close to 100,000 Venture Capital, Private Equity, Angel Investors and Investment Professionals for data, research and technology profiles of global start-ups and covers the private capital markets, including venture capital and private equity.

Ends.

For more information on the PitchBook report visit: [Europe's most active domestic venture investors | PitchBook](#)

About Enterprise Ireland

Enterprise Ireland is the government organisation responsible for the development and growth of Irish enterprises in world markets. We work in partnership with Irish enterprises to help them start, grow, innovate, and win export sales in global markets. In this way, we support sustainable economic growth,

regional development, and secure employment.

<http://www.enterprise-ireland.com>

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Irish Seaweed Biotech Company Raises €1.5 Million Seed Funding



Michael O'Neill, CEO, Pure Ocean Algae

29 August

Pure Ocean Algae to Double Staff in Coming Months

Pure Ocean Algae, a Macro-algae-based biotechnology company based on the Beara peninsula has successfully completed a seed funding round which will see it invest more than €3million over the next two years in building out and growing its business platform as well as creating new jobs in West Cork.

Formed in 2019, Pure Ocean Algae is the first commercial end to end production platform to produce the red seaweed *Palmaria palmata*, commonly known as Dulse. Dulse is a highly prized red seaweed used in the pharmaceutical, cosmetics and food/vegetable protein sectors. Macro-algae species are particularly high in protein and are environmentally sustainable, commanding retail prices of more than €120 per dried Kg dried and grow very well under Irish conditions. The existing natural sources are coming under more and more pressure from over exploitation and destruction of its natural habitat, something that Pure Ocean Algae would like to see reversed.

Led by CEO, Michael O'Neill, the company operates its own land-based hatchery, nursery and processing facility while also developing eighty hectares of licensed sea sites for the growing of various seaweed species. The investment will be used to expand the existing land-based facilities to cater for 250 hectares of sea site production and ancillary services. Working with existing seaweed farmers the company hopes to expand to a production area of 500 hectares over the next three years.

Speaking of the announcement of its first round of funding, **CEO and founder Michael O'Neill** says, *"This funding will allow us to expand our land-based production sites, our sea-based capabilities, and will allow us to expand our R&D and implementation teams. We are also investigating various opportunities to develop the services element of the business through international partnerships and collaborations to bring our technology to a global audience."*

Pure Ocean Algae is a vehicle for positive impact socially, economically, and environmentally. Given the ever-increasing evidence of global warming and its impacts on our lives and for future generations it is

imperative that we investigate new and innovative solutions to slow its progress and ultimately reverse the damage caused by man-made climate change. Our ambition is to grow a business that supports our strong environmental ethos while creating value chains which support our bottom line and satisfy the expectations of our investors.”

This round of Funding was led by The Yield Lab, Europe’s largest early-stage Ag-Tech investor which is itself supported by Enterprise Ireland and AIB. Also joining this funding are the West Cork based Carbery Group, US based Sea-ahead Blue Angel Group and Enterprise Ireland.

Commenting on the investment, **David Bowles, Managing Partner at The Yield lab Europe** said *"We are very excited to be supporting Michael and the team at Pure Ocean Algae. The Blue economy is a very vibrant space currently and critical for Europe to deliver on its climate commitments. At The Yield Lab we have seen a lot of companies that are attempting to deliver seaweed related solutions and we were very impressed with the quality and sophistication of what the team in Beara have delivered. We had no hesitation in investing in such a world leading product."*

Alan Hobbs, Manager Enterprise Ireland HPSU added *"Pure Ocean Algae is an excellent Irish biotech company making a positive sustainable impact with their innovative Red Seaweed platform from the Beara Peninsula. Established in 2019, this HPSU has already made great progress and is providing high quality employment in West Cork. Enterprise Ireland has worked closely with Pure Ocean Algae since its inception and we look forward to continuing to work with Michael and the team on their global ambition"*

Pure Ocean Algae already employs five full time employees and two part time. With this investment the team employed in Beara will increase to twelve full time employees.

press@enterprise-Ireland.Com



5 September

Irish Distillers announces €250 million investment plan for new distillery in Midleton

- The €250 million investment will support the delivery of a new, purpose-built, state-of-the-art distillery which is expected to be operational in 2025
- Once operational, the new distillery will create up to 100 new highly skilled jobs for East Cork over time
- The new distillery will be situated on a site adjacent and connected to the world-famous Midleton Distillery and will generate circa 800 construction jobs over 3 years
- The new distillery will be a carbon neutral operation, facilitated by the implementation of new and innovative MVR (Mechanical Vapour Recompression) technology to reuse waste heat and the use of biogas produced on site.

Irish Distillers, producer of some of the world's most well-known and successful Irish whiskeys, has today announced it will invest 250 million euro to build a new distillery in Midleton Co. Cork in order to meet demand and ensure the necessary future production capacity for its portfolio of Irish whiskeys globally.

The distillery will produce some of the world's most well-known and successful Irish whiskeys, including Jameson, Powers, Redbreast, Midleton Very Rare, the Spot family and Method and Madness.

The new distillery will be situated on a 55-acre site adjacent and connected to the world-famous Midleton Distillery.

Subject to a successful planning application and meeting all licensing requirements, the new distillery will distil pot still and grain whiskey with grain intake, brewing, fermentation, and distillation facilities incorporated into the new 55-acre site.

The new distillery is expected to generate up to 100 highly skilled new jobs for the region over time once the distillery is operational in 2025, and circa 800 jobs during the construction phase.

Irish Distillers recently announced plans to invest €50 million to fund projects aimed at transforming Midleton Distillery into a carbon neutral operation by the end of 2026 by leveraging breakthrough emissions reducing technology to reduce energy use. In line with Irish Distillers' ambition, the new distillery will also be a carbon neutral operation.

The new site will also incorporate various environmental projects which will be developed in order to enhance biodiversity and protect local wildlife.

An expanded distilling capacity is expected to increase Midleton Distillery's requirement for barley and malted barley by up to 50%, which the company intends to source from Irish farmers.

The Irish Distillers project team is partnering with engineering and architecture consultancy firm Arup on the initial design and with Harry Walsh Associates on the planning application. Irish Distillers is engaging with all relevant stakeholders and consulting with community groups in the locality as part of the pre-planning process.

A planning application is expected to be submitted to Cork County Council towards the end of 2022 and, if successful, construction will commence in 2023 with plans for the distillery to be operational in 2025.

Speaking at the announcement, **Taoiseach, Micheál Martin TD**, said: *"The continued success of the Irish whiskey industry is something that we can be incredibly proud of as a nation. Irish Distillers has played an integral role in the development of the industry. Whiskey has been distilled in Midleton for nearly 200 years, and the €250 million investment will deliver hundreds of more jobs into the future, both during construction and once the distillery is operational. Today's announcement is an extremely positive development for Midleton and the wider region, and will further solidify Midleton's reputation as the home of Irish whiskey."*

Nodjame Fouad, Chairman and CEO at Irish Distillers said: *"At Irish Distillers we are always planning for the future growth of Irish whiskey and today is a momentous day for Irish Distillers and the team at Midleton Distillery as we announce a €250 million investment plan to deliver a new, state of the art distillery in Midleton, Co. Cork which will be a carbon neutral operation. We are immensely proud of the continued strong performance of our full portfolio of Irish whiskeys, led by Jameson which sold over 10 million cases in our 2022 financial year. The new distillery will be a beautiful, landmark development with sustainability at its core and will serve to further demonstrate our commitment to Midleton and East Cork, generating more jobs for the region and further driving recognition of Midleton Distillery as the beating heart of Irish whiskey."*

Tommy Keane, Operations Director at Irish Distillers, said: *"Whiskey has been distilled in Midleton for almost 200 years and as such it has always been our desire to secure the future of distilling in East Cork. Today, we are delighted to announce plans for a new distillery connected to the famed Midleton Distillery. We are incredibly proud of Midleton's well-earned reputation as the home of some of the world's most loved Irish whiskeys, and today's announcement – along with the ongoing €13 million redevelopment of our visitor experience – will cement Midleton's reputation as a world-renowned whisk(e)y destination. Through the delivery of this distillery, we also plan to play our part in supporting Ireland's decarbonising strategy while also aligning with Pernod Ricard's commitment to follow a Net Zero trajectory by 2050."*

Leo Clancy, CEO Enterprise Ireland, said: *"Midleton is synonymous with whiskey, and is globally renowned for its products. Enterprise Ireland is delighted to work with Irish Distillers, and we warmly welcome their announcement today about their ambitious new €250m investment plan which will deliver a new distillery that will be a carbon neutral operation. This planned investment will also have an important impact on the local community, by creating up to 100 new jobs in East Cork, as well as hundreds more during the construction phase. It also demonstrates Irish Distillers continued long-term commitment to Ireland and their sustainability ambitions."*

Ends

Notes to the editor:

The distillery will also employ innovative Mechanical Vapor Recompression (MVR) technology which will see a closed loop system capture, compress and recycle waste heat in the distilling process.

Renewable sources of energy, including green hydrogen and biogas will be used to power the distillery.

Irish Distillers has partnered with local experts at EI-H2 to explore opportunities to source green hydrogen and carried out extensive research in partnership with MaREI, the SFI Research Centre for Energy, Climate and Marine, hosted by University College Cork, to determine the biomethane potential of the by-

products of distillation and design the required anaerobic digestion process necessary to produce biogas. Irish Distillers will also partner with StanTech on wastewater treatment and biogas production. In addition to its commitments to eliminate scope 1 and scope 2 emissions across both distilleries, Irish Distillers has also committed to working with suppliers on projects and initiatives to reduce scope 3 emissions across all areas of its business including raw materials, dry goods, transportation, logistics and freight.

About Irish Distillers

Irish Distillers is Ireland's leading supplier of spirits and wines and producer of some of the world's most well-known and successful Irish whiskeys. Led by Jameson, our brands are driving the success of Irish whiskey globally. Jameson is the world's fastest-growing Irish whiskey, selling 10.4 million cases in FY22. Our brands are exported to 130+ markets around the world, with many of those experiencing double-or triple-digit growth.

Irish Distillers was formed in 1966, when a merger took place between John Power & Son, John Jameson & Son and Cork Distilleries Company. In 1988 Irish Distillers joined Pernod Ricard, gaining access to unprecedented levels of investment and an extensive global distribution network. Since 2012, we have invested over €250m to double our production and bottling capacity to meet global demand for our products.

We employ over 800 people across our operations in Cork and Dublin.

About Pernod Ricard

Pernod Ricard is the No.2 worldwide producer of wines and spirits with consolidated sales amounting to €10,701 million in fiscal year FY22. The Group, which owns 17 of the Top 100 Spirits Brands, holds one of the most prestigious and comprehensive portfolios in the industry with over 240 premium brands distributed across more than 160 markets. Pernod Ricard's portfolio includes Absolut Vodka, Ricard pastis, Ballantine's, Chivas Regal, Royal Salute, and The Glenlivet Scotch whiskies, Jameson Irish whiskey, Martell cognac, Havana Club rum, Beefeater gin, Malibu liqueur or Mumm and Perrier- Jouët champagnes. The Group's mission is to unlock the magic of human connections by bringing "Good Times from a Good Place", in line with its Sustainability and Responsibility roadmap. Pernod Ricard's decentralised organisation empowers its 19,480 employees to be on-the-ground ambassadors of its purposeful and inclusive culture of conviviality, bringing people together in meaningful, sustainable and responsible ways to create value over the long term. Executing its strategic plan, Transform & Accelerate, Pernod Ricard now relies on its "Conviviality Platform", a new growth model based on data and artificial intelligence to meet the ever-changing demand of consumers.

Pernod Ricard is listed on Euronext (Ticker: RI; ISIN Code:FR0000120693) and is part of the CAC 40 and Eurostoxx 50 indices.

For further information contact

[Press Office Enterprise Ireland](#)

Jobs announcement at official opening of Galway medical device company



20 September

- **100 new jobs and additional footprint expansion announced to advance ambitious growth plans**

ICS Medical Devices, a leading catheter design & manufacturing services provider, today officially opened its new manufacturing and R&D facility in Galway. The company also announced plans to create 100 new jobs and add a further 10,000 square feet to its newly opened facility to support the company's continued growth.

Welcoming the announcement, **Leo Varadkar, Tánaiste and Minister for Enterprise, Trade and Employment**, said: *“This announcement from ICS Medical Devices is a really great boost to Galway and indeed Ireland as a whole. We have established ourselves now as a leader in the life sciences sector and have a reputation for excellence and innovation. We never take this for granted and will continue to work hard to bring the best investment to all parts of the country. This expansion and ICS Medical Devices’ plans to invest even further is fantastic. I am confident the team will find top talent to fill the 100 new jobs planned, and indeed any further that come down the road. Congratulations to Seamus and the entire team. I wish you all many more years of continued success and growth.”*

ICS Medical Devices moved into its new facility in May 2022, doubling its capacity to serve a growing international base of customers. Throughout 2022 the company has experienced sustained growth and now plans to add 100 new staff and invest in further facility expansion, a move that will enable ICS to serve ever-increasing customer demand.

“Our aim is to become the first-choice provider of contract design, development and manufacturing services for innovative start-up medical device companies throughout Europe, Asia, the Middle East and the US” said Seamus Fahey, CEO and founder of ICS Medical Devices. “Today’s official opening of our new facility marks a significant milestone in achieving that vision. We now plan to accelerate our growth momentum by significantly expanding our team, capacity, and capability. We look forward to serving new and existing customers and welcoming new team members to our world-class facility.”

ICS Medical Devices' new facility was officially opened by **Leo Clancy, CEO of Enterprise Ireland**. Commenting on the announcement, he said: *"ICS Medical Devices is an excellent Irish company delivering cutting-edge solutions that enable its customers to pioneer advancements in catheter technologies. At Enterprise Ireland we are proud to have supported the company's growth momentum and global ambition since it was established only 3 years ago. Strengthening regional enterprise development is a central focus for Enterprise Ireland, and we warmly welcome the ambitious expansion plans announced today which will create 100 high value new jobs in Galway."*

ICS Medical Devices works with innovative start-up medical device companies to develop niche and breakthrough catheter technologies for minimally invasive medicine. The company has built a global reputation as a responsive partner for the design, development, and commercialization of the catheters required to deliver a range of ground-breaking medical interventions such as structural heart, neurovascular and endovascular therapies.

ICS Medical Devices, described as "Ireland's next scaling medtech to watch," has already begun recruitment for new team members and plans to add positions in engineering, research & development, and manufacturing to its existing 70+ person team.

The newly announced footprint expansion, planned for 2023, will add additional manufacturing and cleanroom space to existing operations. As part of that continued expansion, a new customer innovation centre will open to provide specialist support for the development of minimally invasive catheters to make surgeries dramatically safer and more tolerable.

The company also plans to add new technologies to support its catheter capabilities, enabling customers to pioneer advancements in medicine.

About ICS Medical Devices

ICS Medical Devices works with international medical device companies in the design, development and commercialization of catheters, access sheaths, balloon catheters, valve delivery systems, and stent delivery systems. ICS Medical is an Enterprise Ireland client, supported under its High Potential Start Up program. www.icsmedical.com

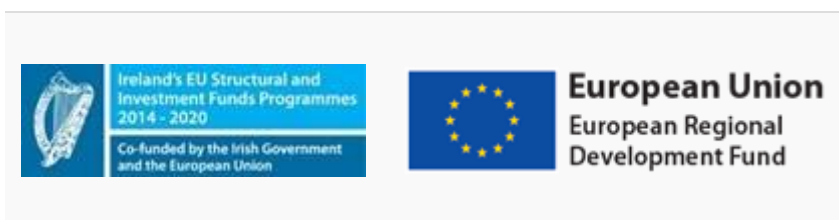
ENDS

For further information contact

Enterprise Ireland Press Office

Research and Innovate

The application of research and innovation to business challenges is critical to the success of the Irish economy. We provide supports for both companies and researchers in Higher Education Institutes to develop new technologies and processes that will lead to job creation and increased exports. Use this section of the site to learn more about our research and innovation supports for businesses and researchers in Higher Education Institutes.



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Use our expertise and contacts to increase the levels and value of R&D and innovation in your company. Through a mix of funding, advice and expertise, we can help you to undertake R&D and increase the amount of innovation in your business. [See our RD&I funding pages for information](#). We can also help you source and license new technologies that could potentially transform your company.

•

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Siliconrepublic Briefings June – September 2022

9/6/2022

Queen's researchers pin origins of heavy metals on neutron star collision

Researchers at Queen's University Belfast claim to have identified the origin of some of the heavier elements of the universe by analysing the results of a neutron star collision.

Heavy elements such as gold and platinum are dispersed throughout the universe in the aftermath of these cosmic events.

Prof Stephen Smartt from Queen's led one of the international teams that, in 2017, hit upon a massive discovery by studying a 100m-year-old collision of two neutron stars, proving that the smash-up produced a burst of gravitational waves.

This collision emitted an intense beam of gamma rays that ejected some of the heaviest-known elements in the universe. Since the cosmic event was spotted in 2017, researchers around the world have been working to identify which specific elements were created.

To continue reading go to:

[Queen's researchers pin origins of heavy metals on neutron star collision \(siliconrepublic.com\)](https://siliconrepublic.com/queen-researchers-pin-origins-heavy-metals-on-neutron-star-collision)

Article by:

Leigh Mc Gowran is a journalist with Silicon Republic

editorial@siliconrepublic.com

Monaghan battery storage project goes live after €25m investment

7/6/2022

The new Lisdrum facility is RWE Renewables' second and largest battery storage site in Ireland.

A new €25m battery storage project is now operational in Lisdrum, Co Monaghan to help maintain stability in Ireland's power grid.

Built by German multinational energy company RWE Renewables, the 60MW facility is intended to provide the rapid delivery of electricity into the power grid to help balance intermittency in electricity generation.

It also aims to provide a short-term backup to address power outages and maintain a more stable and secure electricity supply in Ireland.

Continue reading at: [Monaghan battery storage project goes live after €25m investment \(siliconrepublic.com\)](https://siliconrepublic.com/monaghan-battery-storage-project-goes-live-after-25m-investment)

Article by:

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Limerick researchers' findings show potential of food to treat heart disease

10 August

The Irish-based study lead said food scientists, medical scientists and pharma companies must work together to produce functional foods to treat chronic conditions.

A team of researchers based at the Bernal Institute in University of Limerick (UL) have developed a new guide to designing functional foods to treat various chronic conditions.

Functional foods are foods that provide nutrition and act in a way that positively affects the body, similar to medicine.

Continue reading at:

[Limerick researchers' findings show potential of food to treat heart disease \(siliconrepublic.com\)](https://siliconrepublic.com/limerick-researchers-findings-show-potential-of-food-to-treat-heart-disease)

Article by:

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UCD scientists use CRISPR gene-editing tool to find lung cancer therapies

24 August

In a study that could lead to new treatments, the team used CRISPR to find 80 possible RNA targets that are active in many forms of lung cancer.

Scientists led by a University College Dublin (UCD) researcher believe the CRISPR gene-editing tool could be used to find new therapies for lung cancer.

CRISPR is a powerful tool that offers a cheap and easy method to find and alter a specific piece of DNA within a cell. The tool has been hailed over the years as a potential way to [tackle diseases](#), though concerns about side effects [have been noted](#).

The international team of scientists looked at RNA, which is part of the genetic information in all living cells. While DNA contains the blueprint instructions, RNA is capable of transmitting that information and performing important biological roles in a cell.

Continue reading at:

[UCD scientists use CRISPR gene-editing tool to find lung cancer therapies \(siliconrepublic.com\)](https://siliconrepublic.com/ucd-scientists-use-crispr-gene-editing-tool-to-find-lung-cancer-therapies)

Article by:

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Pharma firm Ipsen upgrades Dublin site with €52m investment

26 September

The company plans to invest a further €15m into the Blanchardstown site, which develops drugs for treating patients with rare and life-limiting conditions.

Biopharma company Ipsen has launched its upgraded Dublin manufacturing site after investing €52m.

The French-listed company extended the Blanchardstown facility as it looks to enhance the production of treatments for patients with rare and life-limiting conditions.

The biopharma firm first shared plans to [invest €25m into the facility](#) in June 2021, before announcing a planned [€27m boost for the site](#) last December.

Continue reading at:

[Pharma firm Ipsen upgrades Dublin site with €52m investment \(siliconrepublic.com\)](https://siliconrepublic.com/pharma-firm-ipсен-upgrades-dublin-site-with-€52m-investment)

Article by:

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PM Group continues global expansion with 300 new jobs in Ireland

1 July

The Irish-headquartered company said it expanded across all its markets last year and is eyeing further growth.

Construction project management company PM Group continues to expand its operations with 500 new jobs planned this year around the world.

PM Group said 300 of these positions will be based in Ireland, where the company is headquartered. Recruitment for the new positions is already underway.

On the company's website, it is advertising for roles in Dublin, Cork, Limerick, Tipperary and Carlow. The roles span a range of disciplines including engineering, construction, commissioning, data analytics, finance and IT.

Continue reading at:

[PM Group continues global expansion with 300 new jobs in Ireland \(siliconrepublic.com\)](https://siliconrepublic.com/news/pm-group-continues-global-expansion-with-300-new-jobs-in-ireland/)

Article by:

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Good vibrations: Developing new tech for energy harvesting

12 July

University of Limerick's Dr Valeria Nico is looking to develop vibrational energy harvesting tech that could provide renewable and sustainable energy for IoT sensors.

After receiving a PhD at University of Limerick in 2018, Dr Valeria Nico started working as a postdoctoral researcher. She has focused on the commercialisation of the vibrational energy harvesting technology that she developed during her PhD, demonstrating to potential customers that this tech could be used to power sensor nodes from ambient vibrations.

Continue reading at:

[Good vibrations: Developing new tech for energy harvesting \(siliconrepublic.com\)](https://siliconrepublic.com/news/good-vibrations-developing-new-tech-for-energy-harvesting/)

Article by:

Siliconrepublic

Ireland's rise in emissions was third highest in EU at the start of this year

18 August

Almost all EU countries saw a rise in emissions at the start of 2022 due to an economic rebound after the decline in activity during the pandemic.

Ireland has seen one of the highest increases in greenhouse gas emissions in the EU this year, according to new estimates from Eurostat.

The **figures** indicate Ireland's emissions rose by 20pc in the first quarter of this year compared to the same period in 2021. This is the third highest increase in the EU, behind Bulgaria at 38pc and Malta at 21pc.

Continue reading at:

[Ireland's rise in emissions was third highest in EU at the start of this year \(siliconrepublic.com\)](https://siliconrepublic.com/news/ireland-s-rise-in-emissions-was-third-highest-in-eu-at-the-start-of-this-year/)

Article by:

Leigh Mc Gowran is a journalist with Silicon Republic

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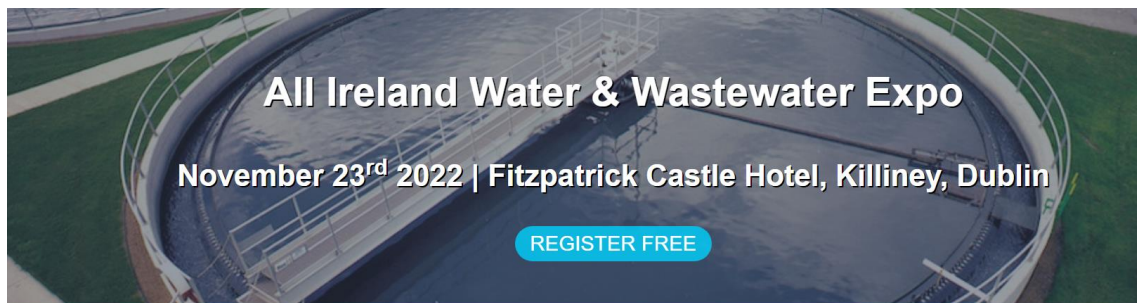


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Go to web site to Register: [Ireland Water & Wastewater Expo \(waterengineering.ie\)](https://waterengineering.ie)

The All-Ireland Water & Wastewater Expo is a conference and exhibition designed to bring together key stakeholders from the municipal, industrial and domestic water & wastewater community together to discuss and debate the key issues facing our water & wastewater sector.

Multi-annual funding worth €6 billion will be provided under the National Development Plan between now and 2026 to bring the water infrastructure and treatment facilities up to world class standards.

Investment includes individual projects like building new or upgrading existing water and wastewater treatment plants or upgrading existing networks. It also includes national programmes like leakage reduction or disinfection programmes where important activities are being delivered at a large scale in a consistent and efficient way across the country.

Industries including pharmaceutical, food and beverage, chemical, electronics, medical device, textiles, precision are also experiencing increased demand for high quality water and will need to meet stringent EU environmental quality standards and regulations. ESG & Sustainability concerns are leading to significant investments in water efficiency and wastewater treatment, waste to energy programmes etc.

Who Should Attend:

- Policy makers and advisors
- Group water scheme operators
- Local authorities
- Energy Managers
- Director of Water Treatment
- Water Director
- Engineering Contractors
- Solution Providers
- Engineering Managers
- Government departments and agencies
- Heads of water supplies, services and planning
- Infrastructure managers
- Large industry users – food, pharma, electronics, chemical, medical
- Technical and environmental managers
- Sustainability managers
- Quality Assurance managers



**IRISH
MANUFACTURING
RESEARCH**

IMR Manufacturing & Supply Chain Award Winners 2022

21 September

In partnership with **Premier Publishing**, our mission is to recognise excellence, promote innovation and raise standards across Ireland's manufacturing Industry. Culminating in a national awards ceremony which gathers the manufacturing community together to celebrate and acknowledge their peers.

Winners

Sustainable Manufacturer of the Year Award sponsored by AIB

Wyeth Nutrition

Best Training & Development Programme sponsored by Irish Medtech Association

Mersus Technologies & Boston Scientific Cork

Contract Manufacturer of The Year Award

Kilbride Classic Cuisine

Best Supply Chain Innovation Award

Moffett Automated Storage

Product Innovation & Design Award sponsored by Hanley Automation

Réaltra Space Systems Engineering

Lean Manufacturing Company of the Year Award

Kerrygold

Circular Economy Leadership Award sponsored by CIRCULÉIRE

Meade Farm Group

Engineering Manufacturing Team of the Year Award – Branding and Media Partners, AMTCE.

Steripack

Health & Safety Project of the Year

Aryzta Ireland

Smart Factory Manufacturer of the Year award sponsored by Bank of Ireland

Boston Scientific Clonmel

Best use of Robotics Award sponsored by Mistubishi Electric

Mechtech Automation Group

Lifetime Achievement Award

Paddy White, Founder and CEO of Reatime

IMR Grand Prix Award

Meade Farm Group

About the Awards

First introduced 2019, the IMR Manufacturing and Supply Chain Awards were established in order to recognise excellence and raise standards across the Irish manufacturing industry and its associated supply chain and are open to all companies on the island of Ireland.

The Awards showcase exceptional achievement, teamwork and innovation in Irish manufacturing. They are unique in recognising not only the achievements of Irish manufacturing companies but also of collaborating teams within them.

The Awards have been introduced to highlight and encourage new talent and innovation and to promote this in both domestic and international markets.

If you would like to keep updated on next year's awards you can sign to the IMR mailing list below on the link:

Full Details and photos at the Awards Ceremony are here:

[IMR Manufacturing & Supply Chain Award Winners 2022](#)

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