



UNIVERSITY COLLEGE CORK PROCESS & CHEMICAL ENGINEERING AWARDS 2025-26

Monday, 23rd March 2026 @ 6.00 pm
Aula Maxima, University College Cork

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and Silver Sponsor





Process & Chemical Engineering



[Process & Chemical Engineering in UCC](#) has its origins in 1927 and has offered a Bachelor's degree (initially in Food Process Engineering) since 1993 and in Process & Chemical Engineering since 2001. It is now one of the largest disciplines within the [School of Engineering and Architecture](#), University College Cork.

The programme is accredited by both Engineers Ireland and the IChemE and since 2019-20 a 5-year integrated ME is offered. At the end of a successful 3rd year, students enter 4th year, to embark on a pathway to either the [5-year Integrated ME](#) for eligible students or they may exit after four years with a BE(Hons) degree.

The ME pathway incorporates a professional work placement that takes place during the 2nd semester of year 4 and during the summer break (8 months).

There are in excess of 200 students studying Process and Chemical Engineering across the 5 years of the BE & ME programmes.

We also offer a 2-year Part-Time level 9 Masters, [MEngSc Pharmaceutical and Biopharmaceutical Engineering](#), aimed at up-skilling/ re-skilling working professionals in the engineering sector in pharma/biopharma manufacturing. From September 2025, we have extended this programme to a new Full-Time programme, [MEngSc Engineering in Pharmaceutical and Biopharmaceutical Systems](#), aimed at young graduates and international students, who wish to take the course full-time in one year.

Besides that our Level 7 [Certificate and Diploma in Process and Chemical Engineering](#) provide knowledge base to experienced professionals without a formal Level 8 degree or young graduates from a Non-Engineering background, willing to make a career shift to engineering/ manufacturing.

Attendee List

University College Cork

College Of Science Engineering & Food Science

- Prof Sarah Culloty Head of College
- Ms Sabá Loftus Head of Development

School Of Engineering & Architecture

- Dr Alan Morrison Head of School
- Ms Helen Buckley Manager School of Engineering & Architecture

Process & Chemical Engineering Staff

- Professor Edmond Byrne Head of Discipline (Process & Chemical)
- Professor Maria De Sousa Gallagher Academic
- Mr Dermot O’Sullivan Academic
- Dr Archishman Bose Academic
- Dr Kevin Cronin Academic
- Dr Francisco Victor Santos da Silva Academic (SOE&A / SOM)
- Dr Vivek Verma Academic
- Dr Joanne Mac Mahon Academic
- Ms Claire O’ Sullivan Administrative
- Mr Donovan Fullam Technical

Industry

Eli Lilly

- Noel W Henderson Associate Director Personal Representative
- Michael Cleere Associate Director Biotech Process Engineering
- Áine MacSeoin Principal Process Engineer
- Aiden Sheehan Senior Bioprocess Engineer

MSD (Brinny)

- John McCaughley Director, Manufacturing Science and Technology (MSAT)
- Evelyn Coleman Senior Technical Specialist / Technical Operations
- TBC

AbbVie

- Michael McCarthy Capital Project Manager (Lead)
- Damien Budden Operations Manager
- Orla Cronin Operations Engineering Manager

MSD (Ballydine)

- Tina McSweeney Senior Scientist, Chemistry
- Edel Linehan Manager Engineering
- Cathal McKeown Specialist Engineering

PM Group

- Paul Ryan Process Engineering Manager Associate Director
- Sean Ryan Deputy Process Department Manager

Johnson & Johnson Innovative Medicine

- Claire Walsh Process Engineering Manager, J&J Innovative Medicine
- Shane Quinn Engineering Projects Manager, J&J Innovative Medicine

Arcadis

- Carmel Killeen Senior Process Engineer
- TBC

PepsiCo

- Michael O'Donovan Associate Global Engineering Manager
- Gavan Murphy Global Engineering Manger
- Kim Wilson Global Design Engineer

Gilead

- Simon Walsh Manufacturing Engineer
- Ronan Dineen Director of Technical Services

Jacobs

- Orla O'Connor Process Department Manager
- Peter Bermingham Senior Process Engineer
- Mark Lee Process Section Head

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EVENT SCHEDULE

- 6:00 pm** MEET & GREET - REFRESHMENTS PROVIDED
- 6:30 pm** OPENING ADDRESS PROF SARAH CULLOTY (HEAD OF COLLEGE, SCIENCE, ENGINEERING & FOOD SCIENCE)
- 6:40 pm** WELCOME TO THE SCHOOL DR ALAN MORRISON (HEAD OF SCHOOL, ENGINEERING AND ARCHITECTURE)
- 6:50 pm** WELCOME TO THE DISCIPLINE PROF EDMOND BYRNE (CHAIR, PROCESS AND CHEMICAL ENGINEERING)

AWARDS

- 7:00 pm** DR ARCHISHMAN BOSE (MC)
- 7:05 pm** J&J INNOVATIVE MEDICINE PROCESS & CHEMICAL ENGINEERING SCHOLARSHIP
- 7:15 pm** ABBVIE SUSTAINABILITY PRIZE IN PROCESS & CHEMICAL ENGINEERING
- 7:20 pm** MSD (BALLYDINE) AWARD FOR BEST INFOGRAPHIC IN PHARMACEUTICAL ENGINEERING
- 7:25 pm** PEPSICO AWARD FOR EXCELLENCE IN PROCESS DESIGN AND FEASIBILITY ASSESSMENTS
- 7:30 pm** GILEAD BERNARD MAGUIRE AWARD
- 7:35 pm** PM-GROUP, DESIGN PROJECT AWARD
- 7:40 pm** ARCADIS DESIGN CHALLENGE
- 7:45 pm** JACOBS PROCESS SAETY AWARD
- 7:50 pm** ELI LILLY AWARDS FOR EXCELLENCE IN PROCESS & CHEMICAL ENGINEERING
- 8:00 pm** WORD FROM OUR GOLD SPONSORS
- 8:10 pm** AWARD CLOSING DR ARCHISHMAN BOSE (MC)

Johnson & Johnson Innovative Medicine

JOHNSON & JOHNSON INNOVATIVE MEDICINE PROCESS & CHEMICAL ENGINEERING SCHOLARSHIP

Award: - €2,500 Per Annum and the opportunity for placement. All those shortlisted receive a one-for-all voucher.

Award Year: 2nd year BE/ME

Presented by: -

Claire Walsh Process Engineering Manager, J&J Innovative Medicine

In Attendance: -

Shane Quinn Engineering Projects Manager, J&J Innovative Medicine

J&J Innovative Medicine

At their facility in Ringaskiddy, they produce drug substance for the market as well as to support clinical trials for new treatments. They have recently completed a major expansion to introduce more capacity for large-scale production.

J&J is a **worldwide group** of pharmaceutical companies:

- Part of Johnson & Johnson Family of Companies, the USA based Healthcare Corporation
- 40,000 employees working across the five continents
- Around \$4.5 billion investments in research & development annually
- A top 10 company in the global pharmaceutical sales

Award Brief

Applications were invited from 2nd year students and short-listed to six students who are then interviewed by staff from UCC and J&J.

Scoring for the scholarship: -

- 20 marks for the Leaving Certificate
- 20 marks for 1st year UCC results

- 60 marks for the interview divided into *Enthusiasm (15 marks)*; *Leadership Potential (15 marks)*; *Innovation (15 marks)*; *Interpersonal skills (15 marks)*

Responsible for Awardee selection: Dr Fatemeh Kavousi and Dr Archishman Bose (Eli Lilly Lecturers, Process and Chemical Engineering), Claire Walsh and Shane Quinn (J&J Innovative Medicine)

2025-26 WINNER CLARE O'DONNELL

SPECIAL AWARD – PLACEMENT DARRAGH HAYES

Runner Ups

RIAD AHMETI

SEAN CRONIN

DANIEL RYAN

abbvie

ABBVIE: SUSTAINABILITY PRIZE IN PROCESS & CHEMICAL ENGINEERING

Award: - A specially minted medal to the value of €150 and a prize of €500

Award Year: 3rd year BE/ME

Presented by:

Michael McCarthy

Engineering Manager

In Attendance:

Damien Budden

Operations Manager

Orla Cronin

Operations Engineering Manager

AbbVie

Founded in 2013, AbbVie is a global, research-driven biopharmaceutical company committed to developing innovative advanced therapies for some of the world's most complex and critical conditions. The company now employs ~2,600 people across eight sites in Ireland.

AbbVie has been listed as one of the best places to work in Ireland for nine consecutive years and named a Best Workplace for Women for the past four years in a row.

The company's mission is to use its expertise, dedicated people and unique approach to innovation to markedly improve treatments across a number of therapeutic areas, including immunology, oncology, virology, aesthetics, neuroscience and eye care.

We harness Irish expertise in complex chemical and biological research, testing discoveries through clinical trials as well as manufacturing many of our medicines and devices here in Ireland.

Award Brief

This award, in recognition of AbbVie's commitment to sustainability and sustainable production, and the importance of sustainability in every facet of their work is an individual award given on the basis of a selection of continuous assessment work taken throughout the module: [**PE3011 Sustainability and Environmental Protection I**](#).

This third-year module includes topics such as life cycle assessment, water & wastewater treatment, air pollution control and solid waste treatment, as well as consideration of the human impact on the natural environment, the UN Sustainable

Development Goals, values, ethics and framings around sustainability and sustainable development and integrative and systems thinking approaches to sustainability.

The award coheres with imperatives of our discipline, as well as those of UCC and the engineering professional bodies around incorporating sustainability and associated values into our programme, and it helps promotes the formation of sustainability literate as well as ethically informed contemporary graduate engineers.

Responsible for Awardee selection: Prof Edmond Byrne (Chair, Process and Chemical Engineering) and Dr John Fitzpatrick (Senior Lecturer, Process and Chemical Engineering).

2025-26 WINNER JACK O'BRIEN

This year's award winner, Jack O'Brien, has been exemplary in his exceptional engagement, top class work quality and valuable insight he afforded across the module.

It was a very close call between Jack and some other exemplary students on the module, but through his work, engagement and output, Jack has demonstrated a strong coherence with AbbVie's core values of seeking meaningful impact, of the necessity of a healthy environment, and of operating responsibly, all key aspects of a flourishing and sustainable society. Congratulations Jack!



MSD: AWARD FOR BEST INFOGRAPHIC POSTER IN PHARMACEUTICAL ENGINEERING

Award: - Winner receives an Apple iPad. Winner and runners up receive a Hamper.

Award Year: 3rd year BE/ME

Presented by:

Tina McSweeney Senior Scientist, Chemistry

In Attendance:

Edel Linehan Manager Engineering

Cathal McKeown Specialist, Engineering

MSD Ireland

MSD Ireland is one of the country's leading healthcare companies, having first established here 50 years ago. We have a dynamic and diverse team of over 3,600 employees currently working across eight locations in Ballydine, Co. Tipperary, Brinny, Co. Cork, Dunboyne, Co. Meath, Dundalk Co. Louth, Carlow and Dublin, and, in addition, operate substantial Human Health and Animal Health businesses. At MSD Ireland, we work at the forefront of science and technology to advance manufacturing excellence and R&D across our Irish sites and global company network.

Award Brief

The Infographic presentation award provides an opportunity for students studying **PE3009 Pharmaceutical Engineering** to explore the design space in pharmaceutical engineering encouraging, enhanced knowledge in technologies and process developments.

Responsible for Awardee selection: Dr Vivek Verma (Lecturer, Process and Chemical Engineering)

2025-26 WINNER RUTH BOWDEN

Ruth's infographic offers a clear and insightful summary of the growing role of digitalization in pharmaceutical manufacturing. It effectively illustrates how digital technologies are transforming data integrity by supporting real-time monitoring, streamlining documentation through automation, and improving traceability across production workflows. By integrating advances such as Industry 4.0 tools, automation, cloud-based systems, and artificial intelligence, digitalization enhances transparency, accuracy, and overall operational performance. Ultimately, the infographic highlights how these innovations strengthen the consistency and reliability of pharmaceutical processes, helping to safeguard patient safety and reinforce confidence in the industry's quality standards.

Runners Ups

OSCAN NANGLE

JOHN O'SULLIVAN



PEPSICO: AWARD FOR EXCELLENCE IN PROCESS DESIGN AND FEASIBILITY ASSESSMENTS

Award: - A prize of €1,000 and option to participate in the PepsiCo intern/grad program if so desired. Top 5 students will be invited to PepsiCo in Cork to meet senior leaders and get a tour of the facilities.

Award Year: 3rd year BE/ME

Presented By:

Gavan Murphy

Global Engineering Manager

In Attendance:

Michael O'Donovan

Associate Global Engineering Manager

Kim Wilson

Global Design Engineer

PepsiCo

PepsiCo products are enjoyed by consumers more than one billion times a day in more than 200 countries and territories around the world. PepsiCo generated nearly \$92 billion in net revenue in 2024, driven by a complementary beverage and convenient foods portfolio that includes Lay's, Doritos, Cheetos, Gatorade, Pepsi-Cola, Mountain Dew, Quaker and SodaStream. PepsiCo's product portfolio includes a wide range of enjoyable foods and beverages, including many iconic brands that generate more than \$1 billion each in estimated annual retail sales.

Guiding PepsiCo is our vision to Be the Global Leader in Beverages and Convenient Foods by Winning with pep+ (PepsiCo Positive). pep+ is our strategic end-to-end transformation that puts sustainability and human capital at the centre of how we will create value and growth by operating within planetary boundaries and inspiring positive change for planet and people.

Award Brief

This Award is to showcase the importance of process design and feasibility assessments in any process engineering decision making. As the first to decision making in any process industry, process modelling and feasibility assessments are indispensable skills that every process engineer must master.

This year, the PepsiCo will be awarded to the student with the highest marks in Assignment 1 of module **PE3016 Process Design and Feasibility Assessments**. As part of this assessment, the students required to model a batch juice manufacturing process in SuperPro Designer, followed by conducting techno-economic and greenhouse gas assessments and finally comparing multiple alternatives using multi-criteria decision.

Responsible for Awardee selection: Dr Archishman Bose (Eli Lilly Lecturer, Process and Chemical Engineering) and Dr Richard O'Shea (Lecturer in Energy Transition Decision Support)

2025-26 WINNER RORY CASHMAN

Rory has presented an excellent assignment showcasing expertise in modelling a batch juice production process in the SuperPro Designer software followed by comprehensive techno-economic and greenhouse gas assessments and multicriteria decision making. Rory has presented a well-articulated and comprehensive report, developing each aspect of the assessment effectively showcasing depth of knowledge and critical thinking capabilities. Well done Rory!

Runner Ups

JACK O'BRIEN

RONAN CROWLY

RUTH BOWDEN

ANNA CARROLL



GILEAD: BERNARD MAGUIRE AWARD

Award: - A specially crafted award (worth €150), and a prize of €500

Award Year: 3rd year BE/ME

Presented By:

Simon Walsh

Manufacturing Engineer

In Attendance:

Ronan Dineen

Director of Technical Services

Gilead Sciences

Gilead Sciences has been operating in Ireland for over 25 years. Since 1987, Gilead has delivered nearly 30 innovative medicines that cure, treat, and prevent life-threatening diseases. Through our pioneering internal discovery and development efforts and our extensive network of partnerships, we are well on our way to delivering 10 new medicines in this decade. We continue to confront the biggest public health challenges of our day and make the impossible possible by investing in world-class science, addressing societal barriers to care and building a culture where our employees can make a real impact together.

Award Brief

This award is named in honour of our late college, Bernard Maguire. Bernard had a diverse career, spanning roles in small molecule operations, ultimately ending up leading bulk tablet manufacturing operations in Gilead Cork. Bernard was a champion for the development of STEM talent within the company and drove people to try to understand the fundamental principles and root causes behind everyday problems seen in daily operations. This award, in Bernard's honour, is to help promote the understanding of the impact of unit operations and particle technology on the development of life-saving medicines.

This award is presented to the highest achieving student in module [PE3002 Unit Operations and Particle Technology](#)

Responsible for Awardee selection: Dr John Fitzpatrick (Senior Lecturer, Process and Chemical Engineering)

2025-26 WINNER

AIDAN HIGGINS



PM GROUP: DESIGN AWARD

Award: - A specially minted medal to the value of €300 and a prize of €1,000

Award Year: 4th year BE/ME

Presented by:

Paul Ryan

Process Engineering Manager Associate Director

In Attendance:

Sean Ryan

Deputy Process Department Manager

PM Group

Celebrating its 50th anniversary in 2023 PM-Group have built extensive expertise in pharma, food, data and medical technologies, with around 4,000 employees across a global network of offices.

PM-Group specialise in, Project Management, Strategic Planning Architecture, Engineering Consultancy, Procurement, Construction Services, Commissioning & Qualification, EH&S, Managed Services, Sustainability and Outsourced Technical Services.

Award Brief

The PM-Group award is presented to the student with the best individual design memo from [PE4050 Design Project](#).

Responsible for Awardee selection: Dermot O'Sullivan, Module Coordinator and Lecturer, Process and Chemical Engineering

2025-26 WINNER

STEPHEN WHOOLEY

The PM award for 2025-26 goes to Stephen Whooley, for his hand-calculation of a 290kW, 60 bar multi-stage centrifugal pump, part of the process to convert used cooking oil to diesel. Not only were the calculations correctly done from first principles, but the work was also presented with clear sketches, both general arrangements and pump details, and the report laid out systematically with the assumptions clearly stated and justified. Stephen then checked with pump vendors to identify specific pump models for the service. Exceptional work.



ARCADIS: DESIGN CHALLENGE AWARD

Award: - Apple Watch

Award Year: 5th year ME

Presented by:

Carmel Killeen

Senior Process Engineer

In attendance:

TBC

Arcadis DPS Group

Arcadis is the leading global Design and Consultancy firm for natural and built assets.

Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets.

We are 35,000 people, active in over 30 countries that generate €5 billion in revenues.

Award Brief

Following a guest lecture on “Process Design – Reactor Systems & Drying Technology” to the 5th year ME students as part of module ***PE6030 Industrial Process Safety; Applications and Control Systems*** the scope of the Design Challenge was to produce a set of P&ID(s) for a Solvent Charging Vessel and a Cone Dryer system. The P&ID(s) were to include all process control features for the system and to outline appropriate process safety interlocks.

The Design Challenge award is presented to the student who developed the best set of P&ID(s) with a clear understanding of the required controls and safety measures.

Responsible for Awardee selection: Dermot O’Sullivan (Lecturer, Process and Chemical Engineering), and Stephen Judd and Carmel Killeen (Arcadis)

2025-26 WINNER

KATE DONOVAN



JACOBS: PROCESS SAFETY AWARD

Award: - Winner receives a voucher of €1,000

Award Year: 5th year ME

Presented By:

Orla O'Connor

Process Department Manager

In Attendance:

Peter Bermingham

Senior Process Engineer

Mark Lee

Process Section Head

Jacobs

At Jacobs, we're challenging today to reinvent tomorrow – delivering outcomes and solutions for the world's most complex challenges. With approximately \$12 billion in annual revenue and a team of almost 45,000, we provide end-to-end services in advanced manufacturing, cities & places, energy, environmental, life sciences, transportation and water. From advisory and consulting, feasibility, planning, design, program and lifecycle management, we're creating a more connected and sustainable world.

Award Brief

At Jacobs Engineering, Process Safety is integral to our commitment to health, safety, and environmental protection. We prioritize managing risks associated with hazardous chemicals and processes in industrial facilities. Through smart engineering solutions and comprehensive process safety management services, we enhance facility reliability, operability, and regulatory compliance. Our BeyondZero approach embodies a culture of continuous improvement and care, aiming for better outcomes for our people, clients, and the environment. This dedication ensures we exceed industry standards, safeguarding our clients and their teams. We are thrilled to recognize the next generation of engineers who diligently incorporate process safety into their work, exemplifying our values and commitment to excellence.

This award is presented to the highest achieving student (final module mark) in the module ***PE6030 Industrial Process Safety; Applications and Control Systems***.

Responsible for Awardee selection: Dermot O’Sullivan, Lecturer, Process and Chemical Engineering

2025-26 WINNER

KATE DONOVAN



ELI LILLY: AWARDS FOR EXCELLENCE IN PROCESS & CHEMICAL ENGINEERING

Award: - A glassware memento and a prize of €500

Award Year: 2nd, 3rd and 4th (BE/ME), 5th (ME), MEngSc (Full-time)

Presented by:

Michael Cleere

Associate Director Biotech Process Engineering

In Attendance:

Noel W Henderson

Associate Director Personal Representative

Áine MacSeoin

Principal Process Engineer

Aiden Sheehan

Senior Bioprocess Engineer

Eli Lilly

In 2026, Lilly marks 150 years since its founding, and entering its most ambitious phase yet. In Ireland, the company now employs over 4,000 people across three sites and a small commercial team.

Lilly Kinsale has operated for 45 years, manufacturing medicines and contributing to the company's global supply network. Lilly Limerick is on track to commence medicine manufacturing, adding capacity to meet increasing patient needs. Lilly Global Business Services (GBS) in Little Island, Cork now employs 2,300 people, with more than 1,000 roles dedicated to research and development, underscoring Ireland's role in the company's scientific and operational ecosystem.

Lilly's activities in Ireland extend beyond production. In 2026, Lilly Limerick achieved LEED certification, evidencing a focus on sustainable design and responsible construction. The company is scaling digital capabilities across its Irish sites with a clear operational objective: to increase output while maintaining "safety first and quality always."

Collaboration with third-level institutions and academia remains a core component of Lilly's model in Ireland, supporting talent development, research translation, and innovation pipelines that aim to reach more patients.

While the scale and technology continue to evolve, Lilly's values and purpose remain consistent: to make life better. The current phase of growth is positioned as the foundation for future impact, aligning legacy with forward execution —“our legacy is what we do next.”

Award Brief

Eli Lilly have sponsored the 'Eli Lilly Awards for Excellence in Process & Chemical Engineering' at UCC from the Academic Year 2006-2007. The Award, which consists of a glassware memento and a cash prize sponsored by Lilly, is made annually to students from each of the four years in Process & Chemical Engineering at UCC on the basis of academic excellence (70%) and contribution to discipline of process and chemical engineering (30%). This year the award has been extended to the new full time masters programme to recognise these dedicated students and their contributions to the department.

Responsible for Awardee selection: The students are nominated by their class and then chosen by staff on the basis of the selection criteria.

2025-26 AWARD WINNERS ARE:

2ND YEAR	CLARE O'DONNELL
3RD YEAR	BILLY MURPHY
4TH YEAR	KATE O'DONOVAN
5TH YEAR	JOHN ST LEGER
MEngSc (FT)	KATELYN FORDE

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