

IChemE Safety Centre

2025 Annual Report



Safety at work is a basic human right

In 2026, the IChemE Safety Centre celebrates its twelfth year.

From a modest start in 2014, when six founding companies joined forces to establish a leadership-based framework to advance process safety, the IChemE Safety Centre has continued to expand and thrive.

The founding partners initiated a powerful learning journey across **six pillars**:

- knowledge and competence
- systems and procedures
- human factors
- engineering and design
- assurance
- culture

allowing the IChemE Safety Centre to explore and share best practice in safety across diverse sectors.

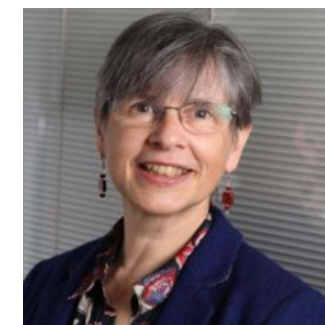
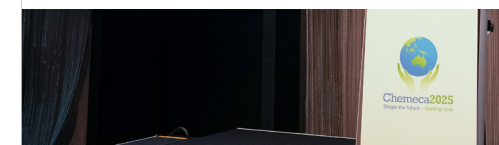
As of the end of 2025, the IChemE Safety Centre proudly sustains a vibrant network of 54 operating and industry partners and 63 supporting partners and collaborations with key institutions and centres of expertise.

In this report, we share the principles that shape our work, celebrate our accomplishments, and outline our vision for the years ahead.

Because safety belongs to everyone, the centre is dedicated to spreading best practices and inspiring collective action.

Come and be part of our journey toward process safety excellence.

Stay Safe



Fiona Macleod
CEng, FIChemE
Chief Technical Officer,
IChemE Safety Centre

Membership

Operating partners

The following companies are represented on the IChemE Safety Centre's Advisory Board and help set the strategic direction for the Centre.

| | | |
|---------------------|---------------|------------------|
| ■ APA | ■ EnQuest | ■ Origin Energy |
| ■ Aramco | ■ Exxon Mobil | ■ Rio Tinto |
| ■ AstraZeneca | ■ Fonterra | ■ Santos Ltd |
| ■ BHP | ■ Jemena | ■ Scottish Water |
| ■ BP | ■ Methanex | ■ Shell |
| ■ Cavendish Nuclear | ■ Newmont | ■ SnowyHydro |
| ■ Chevron | ■ Oji Fibres | ■ Viva Energy |
| ■ CS Energy | ■ Orica | ■ Wessex Water |

Industry partners

Employees from these companies are invited to play an active role in the IChemE Safety Centre's working groups.

| | | |
|--------------------------------------|----------------------------------|-------------------------------|
| ■ Advisian | ■ HIMA | ■ Process Risk Consulting Ltd |
| ■ Arup | ■ Industrial Risk Control Co Ltd | ■ PSRG |
| ■ CNA Hardy | ■ ioMosaic | ■ R4Risk |
| ■ DEKRA Insight | ■ IRESC Global | ■ RAS Limited |
| ■ DNV Australia Pty Ltd | ■ Jensen Hughes | ■ RiskConsult |
| ■ Exida | ■ KBR | ■ Safety Solutions |
| ■ FM Global | ■ Microrisk Group | ■ Sherpa Consulting |
| ■ Gexcon | ■ MWS Risk | ■ Vanguard Solutions |
| ■ GHD Advisory | ■ Neodyme Australia | ■ Worley |
| ■ Global Industrial Safety Solutions | ■ PDV Consultants | ■ Yokogawa |

Our values

The IChemE Safety Centre is a pioneer in process safety, motivated by its dedication to excellence and ethical standards. Guided by the core values established by its advisory board, the IChemE Safety Centre guarantees that all its actions follow these principles. The organisation strives to maintain the highest standards worldwide, focusing on continuous improvement and collaboration. By prioritising partnerships and upholding its commitments, the IChemE Safety Centre fosters a culture of respect, trust, and innovation.

Supporting partners

These organisations are invited to participate in IChemE Safety Centre activity and support our work.

| | | |
|---|---------------------------------------|--|
| ■ Aston University | ■ ONR (Office of Nuclear Regulation) | ■ University of Bradford |
| ■ Civil Aviation Authority of New Zealand | ■ Petroleum Safety Authority Norway | ■ University of Bologna |
| ■ Consejo de Seguridad de Procesos - Latin America (CSP-LA) | ■ P2SAC (Purdue University) | ■ University of Canterbury |
| ■ Dalhousie University | ■ Queens College Belfast | ■ University of Greenwich |
| ■ Danish Environmental Protection Agency | ■ Queensland University of Technology | ■ Università degli Studi dell'Insubria |
| ■ Drexel University | ■ RMIT University | ■ University of Leeds |
| ■ Fujairah Oil Industry Zone (FOIZ) | ■ Safework NSW | ■ University of Limerick |
| ■ Government of South Australia | ■ Singapore Institute of Technology | ■ University of Manchester |
| ■ Heriot-Watt University | ■ Texas A&M University Corpus Christi | ■ University of Melbourne |
| ■ ICES (A*Star) | ■ Universiti Teknologi Petronas | ■ University of New South Wales |
| ■ Michigan Tech | ■ University of Aberdeen | ■ University of Patras |
| ■ Monash University | ■ University College Cork | ■ University of Sheffield |
| ■ Munster Technological University (MTU) | ■ University College Dublin | ■ University of Southampton |
| ■ Newcastle University | ■ University College London | ■ University of Strathclyde |
| ■ Norwegian Directorate for Civil Protection | ■ University of Adelaide | ■ University of Surrey |
| ■ Oil and Pipelines Agency | ■ University of Alberta | ■ University of Toronto |
| | ■ University of Auckland | ■ University of Western Australia |
| | ■ University of Bath | ■ WorkSafe Victoria |

Collaborators

The IChemE Safety Centre seeks to collaborate with other safety organisations across the world including but not limited to:

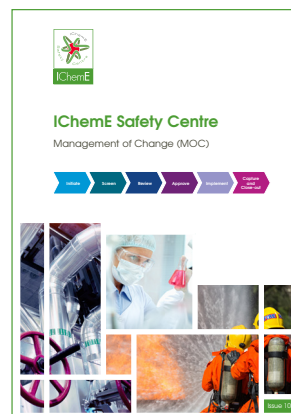
| | | |
|---|---|---|
| ■ Center for Chemical Process Safety (CCPS) | ■ European Process Safety Centre (EPSC) | ■ Mary Kay O'Connor Process Safety Center (MKOPSC) |
| ■ Center of Safety Excellence (CSE) | ■ International Association of Oil and Gas Producers (IOGP) | ■ Step Change in Safety (SCiS) |
| ■ Centre of Advanced Process Safety | ■ Jordan Engineers Association (JEA) | ■ The Mining Remediation Authority |
| ■ Energy Institute (EI) | | ■ The Process Safety Management Competence Programme Board (PSMCPB) |

2025 – a year of progress and delivery

New Release – *Management of Change Guidance*

In late 2025, the IChemE Safety Centre released *Management of Change Guidance* – aimed at helping organisations and individuals to identify and overcome the challenges associated with change management in practice.

The publication contains a refresher on the key concepts of Management of Change (MOC) applicable across a wide range of industrial sectors along with a set of tools to enhance the effectiveness of existing MOC processes. This has been a collaborative effort, and we would like to extend our sincere thanks to Laurence Ledrut and the MOC working group, as well as everyone who reviewed and provided valuable comments throughout the process. The diversity of contributions has been essential in shaping this publication.



Loss Prevention Bulletin – special edition

Buncefield: 20 years on

The December issue of *Loss Prevention Bulletin*, **Buncefield: 20 Years On**, marked the 20th anniversary of the Buncefield incident in the UK. This special edition examined key themes arising from the event, including the emergency response, the interface between industry and regulators, human factors, and the hierarchy of controls. The issue explored what opportunities were missed to prevent the incident and considered the critical question of whether we are safer today as a result of the lessons learned.



International Engagement – in person

The IChemE Safety Centre was active at several key process safety events during 2025, delivering plenary lectures at the Mary Kay O'Connor Risk and Safety Conference in Houston, Texas, the OECD Working Group on Chemical Accidents in Paris, France and EPSC Process Safety Congress in Aachen, Germany. Representatives from the Safety Centre also presented at Hazards Australasia in Adelaide, Hazards 35 in Birmingham, exhibited at the World Congress of Chemical Engineering in Beijing and attended the AIChE 2025 Hydrogen Safety Asia Pacific Conference in Sydney.



International Process Safety Day – online

In 2024, the IChemE Safety Centre (ISC), joined forces with the Center for Chemical Process Safety (CCPS), the Mary Kay O'Connor Process Safety Center (MKOPSC), the European Process Safety Centre (EPSC), and the Fire & Blast Information Group (FABIG) to launch the first International Process Safety Week – delivering expert content, including presentations, case studies and panel discussions. The initiative attracted a broad international audience and provided valuable insights into the major developments in process safety over the last 40 years.

Building on that momentum, 2025's *International Process Safety Day* once again brought together leading organisations and specialists from around the world to explore emerging trends, practical lessons, and real-world applications that can strengthen safety performance across the sector.

The IChemE Safety Centre (ISC) shared three presentations:

- Charles Cowley on Adaptive Leadership in Process Safety
- Gill Kernick on Grenfell Tower Fire 2017
- Laurence Ledrut on Management of Change - How effective is your process?

The profile and impact of International Process Safety Day continue to grow, inspiring organisations and individuals to prioritise prevention, improve preparedness, and collaborate on solutions that protect people, facilities, and the environment.

Membership and social media growth

The IChemE Safety Centre welcomed several new partners during 2025 and is realigning and strengthening engagement across key social media channels. This refocussed activity has resulted in a growth in followers and impact. Early outcomes reflect growing interest in our work and provide a strong foundation for continued engagement and community growth in the year ahead.

This engagement enhances the IChemE Safety Centre's international profile and strategic influence, while providing a platform for experts and industry professionals to share ideas, highlight emerging developments in process safety, and articulate areas where urgent action and focus are needed.

New projects

During 2026, knowledge sharing will be further enhanced through an upcoming webinar program, covering topics such as cybersecurity, artificial intelligence (AI), and data centres/battery energy storage systems (BESS). Partners will be invited to provide feedback to help shape future topics, ensuring the program remains relevant and responsive to the needs of the community, and to finalise the 2026 work program.



Adaptive Leadership

In process safety



Dr Charles Cowley

Grenfell Tower Fire 2017

Leadership and the need for systemic change in learning from accidents

Gill Kernick



Management of Change

How effective is your process?

The Power of Industry Collaboration

Laurence Ledrut
FIEAust CPEng RPEQ (Chemical) AMIChemE
FS Eng (TUV Rheinland) JP (Qual)



Next steps for the IChemE Safety Centre

The IChemE Safety Centre remains a fundamental part of IChemE and its vision of *Engineering a Sustainable World*. Building on our established foundations and past successes, we aim to continue being your trusted partner in process safety, understanding the needs of our partners and supporting their organisations. By focusing on developing, interpreting, and applying safety system knowledge, we ensure that partners' priorities remain central to our work, maximising safety, operational, and business benefits.

We are committed to extending the reach, influence and impact of the IChemE Safety Centre, helping society benefit from shared process safety insights across all sectors. By encouraging a holistic, systems-thinking approach to safety, we aim to make lessons learned from past incidents accessible to a broader audience. Sharing knowledge with new sectors and partners will build capacity and capability, helping to create a safer world together.

Our ongoing collaborations with organisations such as the Center for Chemical Process Safety, the European Process Safety Centre, the Mary Kay O'Connor Safety Center, and the Energy Institute will continue to grow, and we will seek new partnerships where they can benefit both practitioners and society.

Partners will continue to have access to IChemE's training and other programs, including the Professional Process Safety Engineer (PPSE) qualification, which offers a structured pathway to develop and demonstrate expertise in safety. We will work closely with all IChemE's Special Interest and Membership Groups to improve communication, share experience and resources in the area of Safety and Loss Prevention.

We welcome new organisations interested in benchmarking performance, sharing knowledge, and advancing safety for the benefit of all.

We extend our thanks to the organisations already engaged with the IChemE Safety Centre and look forward to strengthening these partnerships further in the year ahead.



Please get in touch



www.ichemesafetycentre.org
safetycentre@icheme.org

