

# Master Class in Process Safety



UNIVERSITY  
of  
LIMERICK  
OLLSCOIL LUIMNIGH

University of Limerick, Limerick, Ireland

Wednesday, 9<sup>th</sup> May, 2018



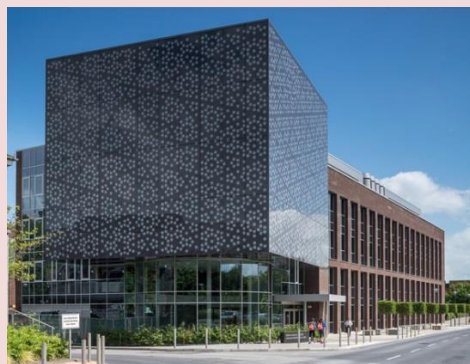
SCIENCE & ENGINEERING

ChemE  
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chemical & process



DEPARTMENT OF  
CHEMICAL SCIENCES



Bernal Institute, University of Limerick

SSPC  
SYNTHESIS AND SOLID STATE PHARMACEUTICAL CENTRE  
Innovation Through Collaboration

The Department of Chemical Sciences at the University of Limerick, in association with the Synthesis and Solid-state Pharmaceutical Centre (SSPC), is pleased to offer a 1-day Master Class in Process Safety delivered by the following recognised experts and specialists in the field of process safety.



**Sally Martin** is Vice President of Health, Safety, Security and Environment (HSSE) for global downstream and manufacturing operations at Shell. She studied electrical engineering at UCC. She has worked for Shell for 30 years, joining as an Instrument Engineer before training as a Process Control Engineer, and working in a number of engineering and project management roles, including two years as Contracting and Procurement Manager of Stanlow refinery. In 2001, she became Shell's Distribution Manager for the UK and Ireland, before becoming General Manager of Petit-Couronne Refinery near Rouen, France in 2005. She returned to London in 2007 to join Shell's downstream strategy and portfolio team and became Vice President of the commercial arm of Shell Global Solutions (Shell's worldwide technical consultancy) in 2010. She moved into her current role in 2013. Sally's presentation is entitled: ***Process Safety Fundamentals – Making Process Safety 'Real' in the Field.***



**Trish Kerin** spent several years working in design, project management, operational, safety and executive roles for the oil, gas and chemical industries before taking up her current role as Director of the Institute of Chemical Engineers Safety Centre (ISC) in 2014. Based in Melbourne, Australia, the ISC works to advance process safety across a wide range of process industries, exchanging knowledge and good practice, and leading collaborative work among its member companies and organisations. In addition to a number of advisory committee roles, Trish currently sits on the board of the Australian National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) and is a member of the Mary Kay O'Connor Process Safety Center steering committee.



**Ron Bell OBE** is the Executive Director of ESC Ltd., a global engineering consultancy, offering services and solutions in all aspects of Functional Safety Management. From 1992 until 2006, he was head of the Electrical and Control Systems Group in the UK Health and Safety Executive (HSE). He chairs one of the two *International Electrotechnical Commission (IEC)* working groups responsible for IEC 61508 (the international standard dealing with safety critical systems) and in that capacity was responsible for both the development of the first and second (current) edition of IEC 61508. In 2005 he received the IEC 1906 Award for his work on functional safety and in particular IEC 61508. He is a Royal Academy of Engineering Visiting Professor at Liverpool John Moores University.



**Ian Travers** is a world expert on process safety management, leadership and the establishment and implementation of key performance indicators for major hazard industries. He holds the Institute of Chemical Engineers' Franklin Medal for his outstanding contribution to Process Safety. Recently retired from the UK Health and Safety Executive (HSE) as Deputy Director, Chemicals Regulation, Ian is now Principal Process Safety Consultant with Leidos. He has over twenty five years' experience in the regulation of chemical and major hazard industries and in the investigation of major incidents to discover the underlying causes. He led the joint HSE and industry response to the 2005 Buncefield major fire and explosion in the UK and established the UK Process Safety Leadership Group. He also chaired the international expert panel to publish the Organisation for Economic Co-operation and Development (OECD) Guidelines on Process Safety Governance which is now the global benchmark on Process Safety Leadership.



**Mark Gallagher** has worked in international motorsport for over 30 years, including senior roles with the Jordan Grand Prix, Red Bull Racing and Cosworth Formula One™ organisations. Off the race track, he makes regular appearances in the media as an analyst and industry expert passing comment on all aspects of Formula One™. Mark is also a leading motivational speaker, drawing parallels between the challenging, high-speed environment of motor racing and the fast-paced, fast-changing business world. In a presentation entitled ***The Race To Zero – the Drive to Eliminate Fatalities & Injuries in the High-Risk Environment of Formula One***, Mark will share insights into the evolution of risk management and safety culture within Formula One™, and discuss how the lessons learned can be transferred to the high hazard industries.



**Michael Kennedy** is Director of SPDS Ltd. (Tarbert, Co. Kerry, Ireland) which provides a chemistry-based, safety-focused process development service to almost all pharmaceutical & chemical manufacturers in Ireland, as well as leading UK and European manufacturers. In this context, Michael draws on his 20 years' experience in the following aspects of chemical reaction hazard evaluation: thermochemical screening, isothermal/adiabatic calorimetry, relief vent sizing and process scale-up. Michael also lectured in organic chemistry for a number of years at Maynooth University (Ireland).

The 1-day Master Class will be a blend of:

- lecture-style plenary sessions (followed by Q&As) aimed at raising awareness and understanding of key issues in process safety, and
- interactive workshops designed to provide practical tools and guidance in the area of process safety.

As such, attendance will greatly benefit those in the pharmaceutical / chemical production sector who are involved with or who influence production activities from either a technical, managerial or strategic perspective.

### VENUE: BERNAL INSTITUTE, ANALOG DEVICES BUILDING

08:00 – 08:30	Registration Tea/coffee	Bernal Institute foyer
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#### PLENARY SESSIONS – Lecture Theatre AD2-010

08:30 – 08:45	Welcomes, introductions, etc.	
08:45 – 09:30	Process Safety Fundamentals – Making process safety ‘real’ in the field	Sally Martin – Keynote speaker
09:30 – 10:15	Overcoming hindsight bias in learning from incidents	Trish Kerin
10:15 – 10:45	Tea/coffee break	Bernal Institute foyer
10:45 – 11:30	Functional Safety – How safe is safe enough?	Ron Bell
11:30 – 12:15	Risk profiling using Bow Tie diagrams	Ian Travers
12:15 – 13:00	Lunch	Bernal Institute foyer
13:00 – 14:00	The Race To Zero – The drive to eliminate fatalities & injuries in the high-risk environment of Formula One	Mark Gallagher

#### WORKSHOPS – AD2-010, MSG-024/025 and LG-011

14:10 – 15:00	Parallel Workshop #1 – Group A Thermochemical safety	Michael Kennedy <i>Venue: AD2-010</i>
	Parallel Workshop #2 – Group B Bow Tie diagrams	Ian Travers <i>Venue: MSG-024/025</i>
	Parallel Workshop #3 – Group C Functional safety	Ron Bell <i>Venue: LG-011</i>
15:00 – 15:30	Tea/coffee break	Bernal Institute foyer
15:40 – 16:30	Parallel Workshop #1 – Group B Thermochemical safety	Michael Kennedy <i>Venue: AD2-010</i>
	Parallel Workshop #2 – Group C Bow Tie diagrams	Ian Travers <i>Venue: MSG-024/025</i>
	Parallel Workshop #3 – Group A Functional safety	Ron Bell <i>Venue: LG-011</i>
16:40 – 17:30	Parallel Workshop #1 – Group C Thermochemical safety	Michael Kennedy <i>Venue: AD2-010</i>
	Parallel Workshop #2 – Group A Bow Tie diagrams	Ian Travers <i>Venue: MSG-024/025</i>
	Parallel Workshop #3 – Group B Functional safety	Ron Bell <i>Venue: LG-011</i>

#### PLENARY SESSION – Lecture Theatre AD2-010

17:35 – 17:45	Master Class wrap-up	
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## VENUE: University of Limerick, Limerick, Ireland

**The University of Limerick (UL)**, is located on the west coast of Ireland along the picturesque River Shannon and enjoys an unspoiled natural environment blended with state-of-the-art teaching and research facilities. It is recognised as possessing one of the most spectacular and environmentally sympathetic university campuses in the world. UL was awarded prestigious 5-star rankings for graduate employability, innovation and knowledge transfer, teaching, engagement, internationalisation and infrastructure by QS Stars independent assessors. With close to 12,000 students, including more than 2,000 international students each year, UL is a young and enterprising university with a proud record of innovation in education and scholarship. With strong links to business and industry, UL excels at translational research which aims to accelerate the practical application of academic research to benefit society. In this regard, UL houses some of the most innovative and successful research centres in Ireland. One such centre, **the Bernal Institute**, utilises its €52 million investment fund to attract research leaders from the world's top 100 ranked universities to share their expertise and drive pioneering research in order to support Ireland's economic growth across the strategically important fields of science, engineering and technology.

### BOOKING DETAILS:

Click [here](#) to register online, or register at:

**<https://www.eventbrite.com/e/master-class-in-process-safety-university-of-limerick-tickets-42238578726>**

#### Fee:

**Standard fee = €200**

**SSPC affiliates = €150**

**IChemE members, Engineers Ireland members = €150**

**SSPC post-docs & post-grads = €50**

Fee includes welcome pack, documentation for workshops, lunch, teas/coffees

### For general queries and further information, please contact:

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