



**NWC Process Industries Division**

## **COMPUTATIONAL FLUID DYNAMICS (CFD) ANALYSIS – INDUSTRIAL AND ACADEMIC APPLICATIONS**

The lecture will explain how CFD is used to model Major Hazards (e.g. toxic releases, fire and explosions) in the oil and gas industry and also focus on the use of Open Source software and discuss some of the challenges of using and implementing 'free' software for industrial applications.

The second lecture will be delivered by Dr Sean Malkeson, a University Lecturer and Researcher at Liverpool John Moores University. Dr Malkeson is a Chartered Mechanical Engineer and his research topics include combustion, fluid dynamics, thermodynamics and heat transfer and Direct Numerical Simulation. The lecture will present an overview of current areas of research for CFD analysis in Academia and the likelihood and timescales upon which we can expect these to be implemented within industry.

This event will encompass two lectures.

- *Open Source Computational Fluid Dynamic (CFD) for Hazard Consequence Modelling.*
- *An overview of CFD research topics in Academia*

The first will be delivered by Dr Chris Dixon, a Senior Technical Safety Engineer in the Major Hazards Group at Shell. Dr Dixon is Chartered Mechanical Engineer with over 20 years' experience in the development and application of numerical methods to solving practical problems in fluid flow and related areas.

**17th October 2019, 18:00 for 18:30**

University of Central Lancashire (GBLT),  
Greenbank Building, Victoria Street, Preston  
PR1 2HE

Places are limited and to register please visit:

<https://nearyou.imeche.org/nearyou/UK/North-Western/event-detail?id=17049>

For more information please contact:

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