## The Safety and Reliability Society Midlands Branch



#### **Evening Meeting** Tuesday 23<sup>rd</sup> January 2018 at 6-30pm - Sponsored by HH RISK Ltd

Attendance free, members and non members welcome, refreshments from 6-00 pm.

**Venue:** Loughborough University, Ashby Road, Loughborough LE11 3TT Room J203, Edward Herbert Building (Building Number 62 in the Central Park on the Map below, car park 5 is closest)



### Talk 1: Evaluating the Impact of Key Parameters in LPG BLEVEs

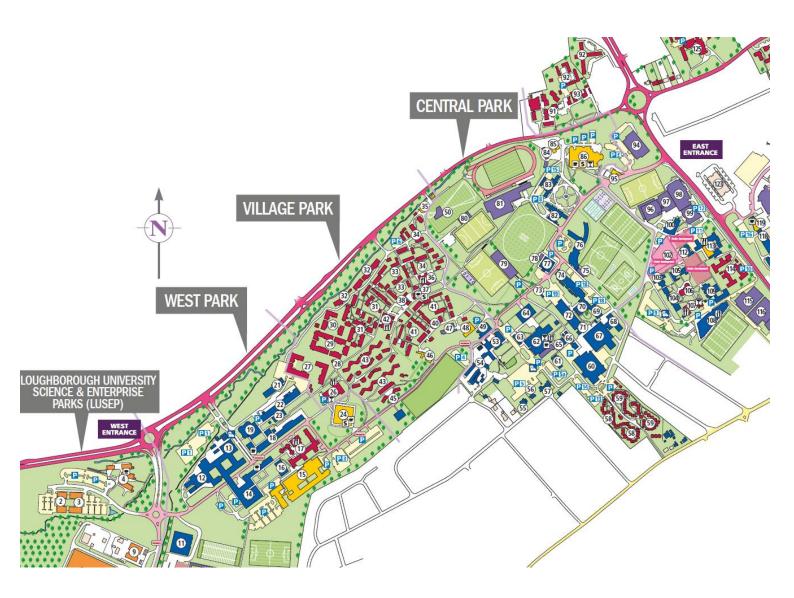
#### Speaker: Tom Dale, DNV-GL

**Summary-** The emergence of LPG BLEVEs as a credible hazard has been driven by increased handling of LPG alongside a growing population density. Five key parameters expected to impact BLEVE outcomes have been identified. These concern the design of Pressure Relief Valves (PRVs), as well as characteristics of the LPG, vessel and fire. By performing a series of modelling simulations using VessFire, alongside a full-scale BLEVE test, it was possible to evaluate the impact that these key parameters have on the BLEVE arrival time and the LPG mass at failure. This presentation focuses on the impact of one key parameter: PRV quantity.

# Talk 2: Assessing the Consequences of Accidental Releases from Sour Oil and Gas Facilities

#### Speaker: Clive Robinson, DNV-GL

**Summary-** Many oil and gas fields contain sour hydrocarbons. If an accidental release of such a fluid occurs it may result in concentrations of hydrogen sulphide which can pose a risk to people. In many cases these risks can dominate the overall risk profile. Operators of oil and gas facilities usually require a quantification of the risks to people as part of their overall risk management process. However, the quantification of risks from sour oil and gas is not straightforward as there are a number of challenging aspects in the analysis. This presentation will discusses some of the key challenges in modelling the consequences of sour oil and gas releases and presents the results from a typical assessment in order to demonstrate the sensitivities to the assumptions in the analysis.



**Directions:** Loughborough University is less than two miles away from junction 23 of the M1 motorway (on the A512). The University is clearly signed on all the other main approach roads to Loughborough. To help ensure your satellite navigation system gets you to Loughborough University correctly, use the postcode LE11 3TT when setting your destination.

There is not much difference between access from the West or East (preferred) entrances when getting to the Edward Herbert Building (No. 62 on the map) and car park No. 5, both located in the central park 'blue buildings' complex.

Further information: Clive Musgrave 07740 047248; Harry Hopkins 07768 681497