

## Supercritical Relief



**Date** 23rd October 2019

**Time** 18:00 - 19:30

**Location** Wood, Shinfield Park, Reading, RG2 9FW

**Cost** £2 IChemE members / £3 non-members

Overpressure protection system design is an art, honed by gradual engineering exposure to a variety of projects – be it in the Oil and Gas, Chemicals or the Nuclear Industry! And even more intriguing is the assessment of overpressure protection for systems in supercritical fluid service, due to uncertainties around fluid phase behaviour, estimation of physical properties by process simulators; and the subsequent impact on sizing of a relief valve.

This event will start with a safety moment focusing on how lack of engineering judgement could prove fatal in an industrial environment. Then the main session will explore the fundamentals of Phase Envelope and application of basic thermodynamics to a pool fire scenario; followed by various methods adopted by process engineers to size relief valves on systems exposed to a hydrocarbon pool fire with the fluid transitioning from subcritical into supercritical phase region. The presentation aims at highlighting the pros and cons of each approach and clarify some common misconceptions.

### Speaker

Badri Narayan Mishra, Principal Oil and Gas Engineer working in the Process Technology and Consulting (PTaC) group of Wood, Reading, UK.

**Please confirm your attendance on the Thames Valley Members Group registration page.**

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