

# Comprehensive Explosion Science

26–27 June 2018, London, UK

13–14 November 2018, Rugby, UK



# Comprehensive Explosion Science

## Understand the phenomenon and consequences of explosions

Gain a comprehensive understanding of the phenomenon of explosions, consequences, prevention techniques and current regulatory requirements for a safe and compliant working environment.

The course covers gas and dust explosion theory, DSEAR and ATEX regulations, ignition theory, hazardous area classification, risk assessment and protection concepts.

### Learning outcomes

By the end of this course, you will understand:

- explosion science; conditions causing and consequences
- the requirements of UK and EU regulations relating to health and safety in potentially explosive atmospheres
- hazardous area classification and explosion risk assessment techniques
- material explosibility properties and test methods
- the role of CFD in explosion consequence analysis
- the importance of understanding and controlling ignition sources
- explosion protection and isolation concepts and design
- the requirements of UK and EU regulations for equipment for use in potentially explosive atmospheres and for explosion protection equipment (the ATEX directive)
- the importance of past incidents and the benefits of learning from them

“ The course was well structured, the lecturers had a great understanding of the content and all my objectives were satisfied. ”

2017 course attendee

## Who will benefit

People responsible for industrial premises that fall under the DSEAR (UK)/ ATEX (EU) regulations, engineers who are responsible for designing new process plants or maintaining existing installations or original equipment manufacturers who are required to design equipment and processes according to the ATEX directive and employees working in hazardous areas.

## Course outline

### Day 1

- gas, vapour and dust explosions
- explosion effects and consequences
- the role of consequence modelling
- DSEAR/ATEX user directive (ATEX 1999/92/EC)
- material testing
- hazardous area classification for gas, vapour and dust
- potential and effective ignition sources

### Day 2

- examples of industrial explosions
- explosion prevention and protection measures
- ATEX equipment directive (ATEX 94/9/EC)
- requirements for electrical and mechanical equipment
- requirements for protective systems
- explosion risk assessment methodology

### In-company training

If you have several colleagues interested in this course, why not consider running it in-house?

For a quote or to discuss your requirements contact [courses@icheme.org](mailto:courses@icheme.org)

## Venue

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IChemE, Davis Building,  
Railway Terrace,  
Rugby, CV21 3HQ, UK

t: **+44 (0)1788 578214**

[www.icheme.org](http://www.icheme.org)

IChemE, One Portland Place,  
London, W1B 1PN, UK

t: **+44 (0)20 7927 8200**

## Fees

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IChemE member      **£1150 + VAT**

Non-member          **£1300 + VAT**

## Discounts

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Discounts are available to companies booking more than one place:

2 places                **5% discount**

3 places                **10% discount**

4 or more places      **15% discount**

Multiple places must be booked at the same time to qualify.

## Find out more and book

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Read more details about the course and book your place at

[www.icheme.org/explosion-science](http://www.icheme.org/explosion-science)

t: **+44 (0)1788 534496**

e: [courses@icheme.org](mailto:courses@icheme.org)

## Accommodation

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Accommodation is not included in the delegate fee. If you need any help with booking a hotel, contact our agent, Trinity Conferences on **+44 (0)1780 484050**. Remember to quote IChemE when booking.

## CPD **14 hrs**

Maximum duration for CPD recording

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[www.icheme.org](http://www.icheme.org)

