

Chemistry for the Non Chemist Workshop Training London 2018

Gain a basic understanding of chemistry for your job role

This introductory workshop (based on our popular webinar) will provide you with a basic understanding of some of the most common physicochemical terms used in the prediction of likely exposure routes and hazardous effects; not only for human health but also for environmental fate and effects. What's more, expanding your knowledge of chemistry will help you with the identification of structural alerts, the use of appropriate read across and mechanisms of action.

Course introduction

In this one-day course, expert toxicologist Laura Robinson will teach you how to identify some important hazard properties, such as pH and its link with corrosivity, and important exposure routes, including the use of water solubility and Log Kow for predicting absorption, as well as environmental transport and fate.



Course leaders



Laura Robinson
Occupational Toxicologist,
Toxicology Consulting Ltd

Laura is a qualified toxicologist and chemist with over ten years' experience in health, safety and environmental issues, as well as chemical compliance.

Laura is an accomplished toxicology trainer, consultant and author of two published books on toxicology. Her third book 'A practical guide to toxicology and human health risk assessment' (John Wiley & Sons) will be published in 2018.

Who should attend?

Professionals within industry, governments, universities and consultants, who want to gain or improve their knowledge of chemical risk assessment.

Day 1 - Wednesday 13 June 2018

09:15 Course Commencement

09:30 PART I: Atomic structure, chemical binding and categories of chemical

- Introduction
- Atomic structure, atomic mass & number, electron shells, isotopes & the periodic table
- Chemical bonding: Covalent (including polar covalent), ionic and metallic bonding & their properties
- Electronegativity and polar bonds/molecules (including their impact on physicochemical properties, such as boiling point)

11:00 Refreshment break

11:15 PART II: Chemical identity

- States of matter
- Substance type – Mono-constituent, multi-constituent substances, UVCB, Nanomaterials, impurities
- Chemical identification (Smilies, IUPAC naming, EC number, CAS number, EINECS and REACH Registration Number)
- Mixtures and articles
- Chemical nomenclature (Organic, inorganic)
- Molecular and structural formula
- Isomers
- Functional groups (including use as structural alerts)

12:15 Lunch

13:15 PART III: Physicochemical properties -and how they can be used

- Boiling point and melting point
- Vapour pressure & volatility
- Density and specific gravity
- Water solubility
- Octanol water partition coefficient
- pH and pKa
- Viscosity
- How physicochemical properties can be used to help likely human and 'environmental' exposures

15:00 Refreshment break

15:15 PART IV: Chemistry in action

- Chemical reactions and equations
- Hydrolysis
- Oxidation reactions (with examples from metabolism)
- Acid – base (neutralisation) reactions
- Flashpoint and flammability
- Explosives

16:30 Questions and close of day



Prices

Full price	- £ 600 (+VAT)
Early bird price - if booked before 12 April 2018	- £ 550 (+VAT)
CW Subscriber price	- £ 550 (+VAT)
CW Subscriber Early bird price - if booked before 12 April 2018	- £ 500 (+VAT)

Payment options:

- Invoice payable by bank transfer, credit card or cheque made payable to CW Research Ltd
- Online using our secure order form

Payment must be made before the training course starts

Three ways to register

 www.events.chemicalwatch.com/63147/chemistry-for-the-non-chemist

 events@chemicalwatch.com

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Location

Etc. Venues (Marble Arch)

Garfield House
86 Edgware Road
London
W2 2EA
Phone: +44 (0) 20 7793 4200

Event times

Day one

13 June 2018, 09:15 - 16:30

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