

# A-Level Chemistry and Science

June – November 2013

95% of top performing schools use Philip Allan

## NEW! CPD Events for your diary

- Teaching A-Level Chemistry for the First Time including  $^{13}\text{C}$  NMR
- Challenging Topics at AS and A2 Chemistry
- How to Succeed in Getting Students into Medical School
- How to be an Outstanding Chemistry Teacher
- Skills and Strategies to Boost Students' Performance in A-Level Chemistry
- **SCIENCE EVENT!** Using Scientific Enquiry to Improve Pupil Outcomes in Science
- Plus more inside

*Very impressed – lots of content, lots of ideas.  
Time passed very quickly  
A Watson, Excelsior Academy*

*Very enjoyable. I personally learned a lot and it also  
reinforced the methods I was using to teach topics were the  
correct ones for the specification  
Anon*

*Enjoyable, interesting and understood finer details  
of specific areas  
Robin Dann, The Cardinal Wiseman School*

- Meet the experts and network with other teachers in your field by attending one of our carefully planned CPD events
- Attend the same course with a colleague and receive £50 discount off your place!
- Why not register your interest now and confirm nearer the date?!

BOOK NOW!

**01869 336410**

[conferences@philipallan.co.uk](mailto:conferences@philipallan.co.uk)

### Expert presenters include:

Martin Bluemel  
Graham Curtis  
Neil Dixon  
George Facer  
Christopher Foster  
Tim Jolliff  
Rob King  
John Older  
Mike Smith  
Ed Walsh

### Plus guest speakers:

Margaret Royal  
Jacquie Thwaites

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## Why should I attend a CPD Course?

- Advice, expertise and content that is second to none
- Develop skills and strategies to enhance your teaching
- Receive detailed notes and materials, which will be of immediate practical benefit in the classroom
- Network and exchange ideas with your peers
- Attendance limited to allow for greater delegate interactivity
- Increase your confidence to improve student results
- Enjoy an uninterrupted 3-course buffet lunch in great surroundings



Philip Allan Events, part of Hodder Education Group, have been established for over 20 years. We only work with the best presenters and experts in the education field. Over 125 chief and principal

examiners, authors, editors and consultants and over 100 guest speakers who will be joining us across 19 different subject areas throughout 2012/2013. Our events are designed and developed with these leading practitioners and academics to give you the skills and information needed for the classroom. They will deliver advice and information in a practical and inspiring way and also give you the forum to discuss and share new ideas with colleagues.

If you're unsure about which event to attend we have a dedicated customer service team and direct contact with our speakers to answer all your questions.

**Make the quality decision for your CPD requirements**

### Plan ahead and make that budget go further

- Pre-book a 3-course package for £630 - that's just £210 per place!\*
- Pre-book a 5-course package for £975 - that's just £195 per place!\*

### Bring a colleague

Buy one teacher place and get £50 off a second teacher place on the same course!\*

\*Terms and Conditions apply. Offers cannot be used in conjunction with any other offer. Offers exclude Teachers Conferences and Masterclass events



# Course Presenters:

## Martin Bluemel

Martin is a highly experienced IB and A-Level Chemistry teacher. He is Head of Chemistry at a leading school in the south west. He is also an experienced examiner for a major awarding body and author of a number of IB Chemistry revision guides.

## Graham Curtis

Graham was Head of Chemistry and Head of Science for many years. He is a principal examiner, teacher and writes for *Chemistry Review* (Philip Allan) as well as publishing a number of Chemistry textbooks.

## Neil Dixon

Neil is a full time Advanced Skills Teacher in Chemistry at South Bromsgrove High School, which was graded by Ofsted in October 2012 as 'Outstanding' in all judgement areas. Neil works as a consultant for the BBC and advises the Royal Society of Chemistry, DfE, Ofqual and other organisations on educational policy and curriculum reform. He has written revision guides and workbooks and contributes to initial teacher training at a leading University on the subjects of exciting chemistry demonstrations and using ICT in Science lessons.

## George Facer

George has written textbooks and teacher guides for AS and A2 Chemistry as well as a number of *Student Unit Guides* for Philip Allan. He has chaired the Chemistry A-Level specification development and is now a reviser for a major examining board.

## Chris Foster

Chris is an experienced and inspiring A-Level Chemistry teacher, he was a highly successful and innovative Head of Chemistry for several years and is now a Boarding House Master. Chris is an experienced trainer and is full of ideas and new methods that make Chemistry teaching and learning more engaging.

## Tim Jolliff

Tim has been teaching A-Level Chemistry for over 20 years with 12 as Head of Chemistry. He has a superb track record of getting able students the top grades and places at Oxbridge. An experienced trainer and author, he wrote the book '*Chemistry for the Talented and Gifted*' for the Royal Society of Chemistry as a School Teacher Fellow. He has a keen intellect which has helped him gain a deep insight into the models and concepts used in A-Level Chemistry and how to teach them inspirationally.

## Rob King

Rob has considerable experience and success in leading highly successful Chemistry and Science Departments for many years, and has taught Chemistry and Mathematics to all abilities and ages in various types of school. He is also a Governor of an Academy. He has written numerous textbooks and teacher guides for GCSE, IGCSE, AS and A2 Chemistry including many publications for Philip Allan and Hodder Education. Rob is a highly experienced examiner for all three main

examination boards at both GCSE and A-Level. He has given many lectures throughout the UK largely based on his innovative teaching style and techniques and was awarded the Salter's Award for teaching Chemistry in recognition of his outstanding contributions to teaching.

## John Older

John has now retired from his post as Vice Principal of a major London independent school. Previously he was Head of Chemistry at the school, teaching the subject at all levels. He has been involved with specification revisions for over 30 years and has been both a Principal Examiner and Principal Moderator for most of that time. He is also co-author with Mike Smith of Chemistry textbooks for AS and A2 and has written a guide to student coursework.

## Margaret Royal

Margaret is Head of Biology and Key Stage 5 leader in a top grammar school with 25 years teaching experience of AS and A2. She has been a part-time lecturer of GTP students at Oxford Brookes University as well as a writer and editor for Boardworks. Margaret started a Medical Society 10 years ago which has successfully placed an increasing number of students at medical school. She is a lay interviewer for UCL Medical School.

## Mike Smith

Mike is currently Assistant Principal at a large sixth form college in Birmingham. The college has over 300 students studying Chemistry. He was previously Head of Chemistry and has extensive experience of teaching A-level Chemistry. He is a very experienced examiner and has worked for a major exam board for well over 20 years. Mike is a well-respected PAU author and has published a number of Chemistry text books and revision books.

## Jacquie Thwaites

Jacquie is a successful author and Programme Leader for Critical Thinking at a Tertiary College, which received a Good Schools Award for the best national results in Critical Thinking at AS Level for non-selective boys. She has worked with QCA as a Consultant for Critical Thinking and runs training and support for Critical Thinking teachers, as well as student revision days through Excellence in Cities. She has delivered critical thinking to year 10 and 11 pupils through a Gifted and Talented programme and has used video conferencing to support this on a tutorial basis.

## Ed Walsh

Ed is a Science Adviser with 20 years' experience of teaching Science, including leading National Strategies project teams on Narrowing the Gap in Science and Curriculum Provision at KS4, and is a very well-respected author of a wide range of Science resources. He was seconded to the National Strategies for two years, as a Regional Adviser on the Science & Innovation Investment Framework supporting schools and LAs in several parts of England and then Senior Adviser for the South of England.



## Teaching A-Level Chemistry for the First Time Including $^{13}\text{C}$ NMR

NEW

*The essential guide to surviving your first year as a new or inexperienced teacher*

Central London: Wednesday, 5 June 2013

### How will I benefit?

Beginning to teach the AS or A2 course can be daunting. This day will guide you to teach a successful A-Level course with confidence. It will:

- advise you of the best approach to the more demanding topics
- guide you through the examination mark schemes
- help you to equip pupils for the AS and A2 examinations
- teach you how to prepare students for the coursework tasks
- give you confidence in delivering effective and appropriate practical sessions

**Course Presenters:** John Older & Mike Smith

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Planning to cover the AS/A2 course</b>
10.30am	<b>Topics covering formulae, equations, oxidation numbers, moles, bonding, periodicity and groups 2 &amp; 7</b>
11.15am	Morning coffee
11.30am	<b>Organic Chemistry</b> <ul style="list-style-type: none"><li>• Including hydrocarbons, alcohols, halogenoalkanes as well as modern methods of analysis</li></ul>
12.00pm	<b>Physical Chemistry</b> <ul style="list-style-type: none"><li>• Including enthalpy changes, rates, equilibrium as well as environmental aspects to include global warming, ozone layer, air pollution and green chemistry</li></ul>
12.30pm	Lunch
1.30pm	<b>Arenes, carbonyls, carboxylic acids and derivatives, nitrogen compounds, polymers and multi-stage synthesis</b>
2.00pm	<b>Rates, equilibrium, acids, bases and buffers, enthalpy and entropy</b>
2.30pm	<b>Spectroscopy including <math>^{13}\text{C}</math> NMR</b>
3.00pm	<b>Redox reactions &amp; electrode potentials</b> Working break
3.30pm	<b>Common errors in exams</b>
4.00pm	Course ends

## Teaching Difficult Topics for A-Level Chemistry

NEW

*Get your students to reach for their best possible grade*

Central London: Thursday, 13 June 2013

### How will I benefit?

The definitive guide to help to develop the potential of your most able students, and ensure that your other students maximise their own performance.

The course will examine in detail the most challenging topics and help you to teach them with confidence. You will cover:

- how your students learn
- how to integrate different learning styles into your lessons to improve teaching and learning for all
- making Chemistry lessons fun but also extremely productive
- how to prepare students to tackle the papers with confidence
- methods to develop knowledge and skills at AS and A2

**Course Presenters:** Mike Smith

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Explore various learning styles and approaches to delivering an excellent Chemistry lesson: using illustrative examples such as free radical substitution and optical isomerism</b>
10.45am	<b>Organic Chemistry – how do we get students to love it and enjoy writing mechanisms</b>
11.15am	Morning coffee
11.30am	<b>Kinetics: demonstrations and practicals to enhance the taught content</b>
12.00pm	<b>Equilibrium</b>
12.30pm	<b>Acids and bases: practical and theoretical approaches to delivering high quality lessons</b>
1.00pm	Lunch
2.00pm	<b>Energetics: Born Haber cycles and Entropy and tips for checking understanding</b>
2.30pm	<b>Analytical chemistry, Proton and Carbon <math>^{13}\text{C}</math> NMR practice and suggestions for resources</b>
3.00pm	<b>Stretch and Challenge and exam technique: what are the examiners looking for?</b>
3.45pm	Course ends



## How to Succeed in Getting Students into Medical School

*Increase your students' chances of success in this highly competitive field!*

Central London: Thursday, 20 June 2013

### How will I benefit?

This course offers essential advice for any teacher who wants to maximise their students' chances of securing a place at a University to read medicine, dentistry or veterinary medicine. Experienced tutors Margaret and Jacquie will prepare you to handle all aspects of the application process with confidence including: writing references; the personal statement; and preparing your students for entry tests and interviews. You will cover:

- the application process and differences between various institutions
- writing effective references and personal statements
- what is required for the admissions tests (BMAT and UKCAT)
- preparation for interviews
- ex-curricular activities to broaden knowledge and gain experience of medicine

**Course Presenters:** Margaret Royal & Jacquie Thwaites

**Course fee:** £235 plus VAT

### Programme

10.00am	Registration and coffee
10.15am	<b>Welcome and introduction to the course</b>
10.20am	<b>Why medicine?</b> <ul style="list-style-type: none"><li>• Making students aware of the realities of the course – personal commitment to the course vs parental pressure</li><li>• Back-up strategies</li></ul>
	<b>Admissions procedures</b> <ul style="list-style-type: none"><li>• Different types of medical courses &amp; institutions</li><li>• BMAT</li><li>• UKCAT</li></ul>
11.15am	Morning coffee
11.30am	<b>Admissions tests preparation workshop</b> <ul style="list-style-type: none"><li>• Skills training for BMAT and UKCAT selection tests</li><li>• Successful essay writing</li></ul>
1.00pm	Lunch
1.45pm	<b>Writing personal statements and references</b> <ul style="list-style-type: none"><li>• Making an impact with a medical personal statement</li><li>• References – are they worth having?</li></ul>
2.45pm	Afternoon tea
3.00pm	<b>The interview process workshop</b> <ul style="list-style-type: none"><li>• Formal interviews</li><li>• MMIs</li><li>• Training students and instilling confidence</li></ul>
3.45pm	<b>Questions</b>
4.00pm	Course ends

## How to be an Outstanding Chemistry Teacher

NEW

Central London: Monday, 24 June 2013

### How will I benefit?

With a keen focus on the Ofsted guidance for 'Outstanding' teaching and learning, this course will offer, and help you share, ideas and approaches to invigorate your teaching so that all students in your classes make excellent progress in every lesson.

Generic skills in teaching, such as questioning and Assessment for Learning, will be demonstrated with a chemical flavour. Opportunities for exciting practical demonstrations will be described and resources for creative group work activities and ICT will also be shared with participants.

Above all, you will have the chance to:

- meet other teachers
- reflect on your own teaching
- plan how you will move forward
- come away with a host of new ideas

Suitable for teachers at all levels of experience who are looking to improve their teaching and their students' motivation and understanding of Chemistry.

**Course Presenter:** Neil Dixon

**Course fee:** £235 plus VAT

### Programme

10.00am	Registration and coffee
10.15am	<b>What does 'Outstanding' look like?</b> <ul style="list-style-type: none"><li>• Drawing inspiration from various sources (not just the Ofsted guidance)</li></ul>
10.30am	<b>Checking on students' progress throughout lessons</b> <ul style="list-style-type: none"><li>• Insightful questioning</li><li>• Mini-plenaries</li><li>• Assessment for Learning – how to act on what students have or haven't learned!</li></ul>
11.00am	Morning coffee <ul style="list-style-type: none"><li>• A chance to frame questions to be answered later during the day</li></ul>
11.15am	<b>Exciting demonstrations to inspire students</b> <ul style="list-style-type: none"><li>• Surely that's banned?!</li></ul>
12.00pm	<b>Novel practicals to engage students</b> <ul style="list-style-type: none"><li>• Coping with limitations on teaching time and technical support</li></ul>
12.45pm	Lunch <ul style="list-style-type: none"><li>• A chance to reflect on professional learning so far</li></ul>
1.30pm	<b>Creative ideas to motivate students in 'dry' areas of the syllabus</b> <ul style="list-style-type: none"><li>• You don't always need beakers and Bunsen burners</li></ul>
2.00pm	Afternoon tea <ul style="list-style-type: none"><li>• A chance to discuss questions that have not yet been answered</li></ul>
2.15pm	<b>Using ICT to enhance students' progress in Chemistry</b>
3.00pm	<b>Reflection and planning time</b>
3.45pm	<b>Planning ahead and making time to support your own Continuing Professional Development</b>
4.00pm	Course ends



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## Challenging Topics at AS and A2 Chemistry

Central London: Monday, 24 June 2013

### How will I benefit?

The definitive guide to help to develop the potential of your most able students!

This course will examine in detail the most challenging topics at AS and A2 and help you to teach these with confidence.

- Explore approaches and teaching methods to develop knowledge and skills at AS/A2
- Learn how to integrate *How Science Works* discussions into lessons
- Discover how to use demonstration experiments and *HSW* effectively to challenge application of knowledge and discussion

**Course Presenter:** Graham Curtis

**Course fee:** £235 plus VAT

### Programme

10.00am	Registration and coffee <b>Each session will include consideration of <i>How Science Works</i> in questions to extend knowledge, understanding and application</b>
10.05am	<b>Understanding organic structure and mechanism</b> <ul style="list-style-type: none"><li>• A survey of all the mechanisms included at AS and A2</li><li>• An understanding of these based on structure</li></ul>
11.05am	Morning coffee
11.20am	<b>Redox and Cells</b> <ul style="list-style-type: none"><li>• Understanding oxidation states and half-equations</li><li>• Electrode potentials and their use in predicting whether reactions occur</li><li>• Electrochemical Cells</li></ul>
12.20pm	Lunch
1.30pm	<b>Equilibria</b> <ul style="list-style-type: none"><li>• Qualitative at AS and quantitative at A2</li><li>• Kc and calculations</li><li>• pH calculations including buffers</li></ul>
2.20pm	Afternoon tea
2.50pm	<b>Inorganic Chemistry</b> Understanding the changes in physical and chemical properties <ul style="list-style-type: none"><li>• Across Period 3</li><li>• Down Group 2</li><li>• Down Group 7</li><li>• Within the First Transition Series</li></ul>
3.50pm	<b>Plenary</b>
4.00pm	Course ends

## Bridging the Gap Between GCSE and AS Chemistry

RELEVANT FOR ALL MAJOR SPECIFICATIONS

### The definitive guide to help new or inexperienced teachers

Central London: Tuesday, 25 June 2013

### How will I benefit?

This course will consider the fundamentals of AS and how to build/develop understanding of these from simpler GCSE ideas. It will explore how to use the Periodic Table to understand atomic structure and to show how physical chemistry topics of bonding, structure and redox relate to both physical and chemical properties of the organic and inorganic compounds studied at AS/A2. By attending this day you will:

- gain knowledge to improve the performance of all students
- be equipped with the understanding to move with confidence from GCSE to AS
- explore approaches and teaching methods to develop knowledge and skills which are needed to succeed at AS/A2
- discover how to incorporate *How Science Works* discussions into lessons

**Course Presenter:** Graham Curtis

**Course fee:** £235 plus VAT

### Programme

10.00am	Registration and coffee
10.10am	<b>Atomic structure and periodicity: upgrading GCSE ideas to GCE requirements</b> <ul style="list-style-type: none"><li>• Linking the Periodic Table to formulae and atomic structure</li><li>• Understanding periodic variations across periods and down groups</li></ul>
11.10am	Morning coffee
11.25am	<b>Bonding and structure: what are the particles and what holds them together?</b> <ul style="list-style-type: none"><li>• Development of GCSE bonding to include electronegativity and bond polarity</li><li>• Shapes of simple molecules and ions</li></ul>
12.05pm	<b>Calculations at AS</b> <ul style="list-style-type: none"><li>• Building confidence in using moles in AS calculations involving masses, gases and solutions</li></ul>
12.35pm	Lunch
1.35pm	<b>Redox: using demonstrations to help understanding</b> <ul style="list-style-type: none"><li>• Understanding the definitions and recognising redox changes</li><li>• Half-equations and redox equations made easy</li><li>• Using redox to understand Group 7 chemistry</li></ul>
2.35pm	Afternoon tea
2.50pm	<b>Organic Chemistry</b> Structure, isomerism and reaction mechanisms: understanding how and why reactions occur <ul style="list-style-type: none"><li>• Alkanes, alkenes, halogenoalkanes and alcohols</li><li>• Addition, substitution and elimination reactions</li></ul>
3.50pm	<b>Plenary</b>
4.00pm	Course ends





## Stretch and Challenge – How to get that A\* Grade

**A focus on aspects of AS and A2 Chemistry that allow development beyond the specification, includes  $^{13}\text{C}$  NMR**

Central London: Wednesday, 26 June 2013

### How will I benefit?

This workshop will examine the most difficult aspects of the A-Level course and look at how these might be integrated into teaching schemes. It will advise you how to equip your more able students with the necessary experience to tackle questions that require a deeper understanding of the most challenging topics for A-Level. It will:

- help you to prepare able students for the challenge of the A2 year including  $^{13}\text{C}$  NMR
- show you how to make the most of available resources for *Stretch and Challenge* exercises
- give examples of exam questions which students must feel able to answer confidently
- provide you with a range of sample questions to use for classroom and homework exercises

**Course Presenters:** John Older & Mike Smith

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Where to start: AS homework that stretch the most able</b>
10.30am	<b>Equilibria, pH and buffers</b>
11.15am	Morning coffee
11.30am	<b>Getting the most out of mechanisms</b>
12.30pm	Lunch
1.30pm	<b>Thermodynamics, enthalpy, entropy and redox</b>
2.30pm	Afternoon tea
2.45pm	<b>Using data and knowledge</b>
3.15pm	<b>Analysis of mixtures, organic synthesis</b>
3.45pm	<b>Plenary</b>
4.00pm	Course ends

## Using Scientific Enquiry to Improve Pupil Outcomes in Science

**SCIENCE EVENT!**

RELEVANT FOR  
for KS3 & KS4

**Inspiring students to think like scientists**

Central London: Wednesday, 26 June 2013

### How will I benefit?

This course will show you how to support the progress of your curriculum team in making effective use of practical work and enquiry skills in Science. You will:

- explore what is actually meant by scientific enquiry and what its role is within secondary science courses
- learn what research shows about what students actually learn from practical work and explore how practical lessons should be staged to maximise learning
- find out how effective use of questions and groupwork supports scientific enquiry
- learn how 'Bad Science' can make for good Science lessons
- decide how to make best use of scientific enquiry to maximise student outcomes

**Course Presenter:** Ed Walsh

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Introduction and starter activities</b>
10.15am	<b>What is the role of scientific enquiry in the school curriculum?</b>
11.15am	Morning coffee
11.30am	<b>Enquiry questions as a focus for effective learning</b>
12.30pm	Lunch
1.30pm	<b>Bad Science – how the abuse of Science can provide teachers with some great lesson ideas</b>
2.15pm	<b>Effective use of investigations</b>
3.00pm	Afternoon tea
3.15pm	<b>Using enquiry work to secure better outcomes for students</b>
4.00pm	<b>Discussion and feedback</b>
4.15pm	Course ends



**BOOK NOW! 01869 336410**

## Skills and Strategies to Boost Students' Performance in A-Level Chemistry

RELEVANT FOR ALL MAJOR SPECIFICATIONS

Central London: Thursday, 27 June 2013

### How will I benefit?

This course is aimed at all teachers of Chemistry, whether you are new to teaching the subject or are a more experienced teacher. If you are looking to improve students' understanding and skills for A-Level and striving to maximise their grades then this course is for you.

Relevant to all three English exam boards

**Course Presenter:** George Facer

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Calculations</b> <ul style="list-style-type: none"><li>• How to score the maximum possible marks</li></ul>
10.45am	<b>'Suggest' questions</b> <ul style="list-style-type: none"><li>• How to use knowledge about similar substances to answer a question that is otherwise outside the specification</li></ul>
11.15am	Morning coffee
11.30am	<b>Space on question paper versus marks allotted</b> <ul style="list-style-type: none"><li>• How to make sure that the question is answered fully</li></ul>
12.00pm	<b>Resources</b> <ul style="list-style-type: none"><li>• When and how to use a textbook and revision guides, and best uses of the internet to support independent learning</li></ul>
12.45pm	Lunch
1.45pm	<b>Synopticity</b> <ul style="list-style-type: none"><li>• How certain topics in an earlier module need to be understood in later modules</li></ul>
2.30pm	<b>Practical questions in theory papers</b> <ul style="list-style-type: none"><li>• The need to know what practical techniques are used and why</li></ul>
3.00pm	Afternoon tea
3.15pm	<b>Assessed practicals</b> <ul style="list-style-type: none"><li>• How to maximise the marks awarded and possible pitfalls that reduce the grade awarded</li></ul>
4.00pm	Course ends

## Stretch and Challenge in A2 Chemistry

RELEVANT FOR EDEXCEL

Central London: Thursday, 17 October 2013

### How will I benefit?

The day will make you aware of the depth required for A\* answers, especially in Physical Chemistry. You will:

- understand common misconceptions
- increase your understanding of difficult topics
- examine and analyse the synoptic nature of the A2 Chemistry course and exams
- discover where examiners demand through answers

**Course Presenter:** George Facer

**Course fee:** £235 plus VAT

### Programme

9.45am	Registration and coffee
10.00am	<b>Rates, chirality and mechanisms</b>
10.45am	<b>Entropy and equilibrium</b>
11.30am	Morning coffee
11.45am	<b>Buffer solutions</b>
12.15pm	<b>Spectroscopy</b>
12.45pm	Lunch
1.30pm	<b>Redox equilibria</b>
2.00pm	<b>Benzene and phenol – reactivity and mechanisms</b>
2.30pm	Afternoon tea
2.45pm	<b>Amino acids</b>
3.14pm	<b>Synthesis and analysis</b>
4.00pm	Course ends





## Inspiring Approaches to Difficult Topics for A-Level and IB Chemistry

Central London: Thursday, 17 October 2013

NEW

RELEVANT FOR ALL MAJOR SPECIFICATIONS

### How will I benefit?

Martin, Chris and Tim will provide a range of approaches to help you to transform challenging chemical concepts and principles from the most difficult into the most inspiring. They will explore ideas, activities and teaching techniques to increase student engagement, improve understanding and help your students to make connections across all areas of Chemistry.

The course will focus on improving motivation/learning and ultimately results though increased understanding of underlying principles rather than rote learning.

Included is a 'Difficult Topics Panel' discussion to give you the opportunity to share best practice approaches and ask our expert presenters for help with any topic or issue which your students have. This is a unique opportunity to draw on the cumulative experience of over 60 years of teaching IB and A-Level Chemistry between our presenters.

- Develop your own understanding of how to teach the most difficult concepts such as **organic mechanisms, entropy, free energy** and **electrode potentials**
- Explore new approaches and teaching methods to increase students engagement and motivation
- Gain ideas and activities to get these difficult concepts across
- Discuss techniques to develop the students underlying understanding rather than just 'learning the rules'
- Give your students more confidence to tackle **calculations**
- Teach **organic chemistry** with less emphasis on rote learning

**Course Presenters:** Martin Bluemel, Christopher Foster & Tim Jolliff

**Course fee:** £235 plus VAT

### Programme

- 9.45am Registration and coffee
- 10.00am **Entropy, the Second law, Free energy and Electrode potentials subject update and how to teach them**  
*Tim Jolliff*
- 11.15am Morning coffee
- 11.30am **Approaches to teaching chemical calculations: what do students struggle with and how to teach this better**
  - Giving students confidence
  - Strategies to train students to use the information in the question*Martin Bluemel*
- 12.15pm **Organic Chemistry – giving students the bigger picture**
  - Understanding and applying principles
  - Activities and resources to make the concepts more memorable*Martin Bluemel*
- 1.00pm Lunch
- 2.00pm **Inspiring approaches to improve motivation, understanding of concepts and challenge all your learners**
  - How to improve student motivation and engagement
  - Help your students take ownership of their learning
  - Encourage active, resourceful and independent learners*Christopher Foster*
- 3.00pm **Difficult Topics Panel**  
"Question time" style discussion of topics, teaching approaches and student hang-ups to share best practice approaches – a great opportunity for you to ask your own questions of our expert panel. E.g.
  - How do you teach...?
  - Why do we always...?
  - How do you get around...?*Martin, Chris & Tim*
- 3.45pm Course ends

## How to Lead an Outstanding Department

### For Heads, or aspiring Heads, of Science, Chemistry, Biology and/or Physics

Central London: Thursday, 7 November 2013

### How will I benefit?

Rob will provide practical advice, ideas and strategies to support those who are either presently Heads of Department, or aspiring to be, for Science, Chemistry or individual sciences. You will cover the key issues affecting the performance of your department, including how to be a more effective leader and manager, and how to lead the team successfully through inspection. The course will be interactive and there will be plenty of opportunity to evaluate key factors affecting departmental performance and share your own experience and ideas.

**Course Presenter:** Rob King

**Course fee:** £235 plus VAT

### Programme

- 9.45am Registration, coffee and starter activities
- 10.00am **What makes a good Head of Science or Chemistry?**
  - Management and leadership
  - Responsibilities and demands of the role
  - Prioritising and time management
  - Effective meetings
  - Managing change
  - Career progression and staff development
- 11.15am Morning coffee
- 11.30am **Managing people**
  - Dealing with challenging scenarios
  - Communication
  - Personnel issues
- 12.30pm Lunch
- 1.30pm **Raising the status of the department both within the school and externally**
  - Successful marketing
  - Developing links with industry/Universities etc.
  - Developing links with other schools
- 2.45pm Afternoon tea
- 3.00pm **Monitoring quality and preparing for inspection**
  - Department documentation
  - Health and Safety issues
  - Self evaluation
  - The successful department
  - Taking the department forward
- 4.00pm **Discussion and feedback**
- 4.15pm Course ends



BOOK NOW! 01869 336410

# New to Teaching A-Level Chemistry

RELEVANT FOR  
AQA, OCR  
& EDEXCEL

Central London: Wednesday, 27 November 2013

## How will I benefit?

This course will be of benefit to all new, returning or inexperienced teachers of Chemistry, and experienced GCSE Chemistry teachers who are keen to boost their confidence in teaching the most challenging topics at A-Level.

Experienced and inspiring tutor, Neil Dixon, will provide effective strategies to teach the content well, keep your students engaged, and not spend your life planning lessons and creating new resources.

You will be asked to audit your confidence in specific areas of the syllabus and will then work in small groups during the day to allow for tailored peer support where possible. Participants will then demonstrate their improved understanding by completing exam style questions!

Throughout all the sessions, you will:

- learn and share top tips and best practice ideas that have been proven in the classroom to help students make progress in their understanding and performance
- be introduced to a large number of resources to support your teaching and your own Continuing Professional Development
- have the opportunity to network with other teachers and share ideas

**Course Presenter:** Neil Dixon

**Course fee:** £235 plus VAT

## Programme

10.00am	Registration and coffee
10.15am	<b>Teaching the mole</b> <ul style="list-style-type: none"><li>• A generic method for quantitative calculations</li><li>• Suitable resources for improving students' practical skills</li></ul>
10.30am	<b>Energising energetics lessons</b> <ul style="list-style-type: none"><li>• A strategic approach to using Hess' Law</li><li>• Calorimetry</li><li>• Bond enthalpy calculations</li></ul>
11.00am	Morning coffee
11.15am	<b>Reducing the headaches in redox</b> <ul style="list-style-type: none"><li>• Oxidation states</li><li>• Electrochemical cells and reaction direction</li></ul>
11.45am	<b>Helping with halogens</b> <ul style="list-style-type: none"><li>• Applying redox principles</li></ul>
12.00pm	<b>Being kind with kinetics</b> <ul style="list-style-type: none"><li>• Deducing and using rate equations</li></ul>
12.30pm	Lunch
1.15pm	<b>Striking a balance with equilibria</b> <ul style="list-style-type: none"><li>• Calculations involving K<sub>c</sub></li></ul>
1.45pm	<b>Making sense of mechanisms</b> <ul style="list-style-type: none"><li>• It's not just about memorising them, but that really does help!</li></ul>
2.15pm	Afternoon tea and further questions
2.30pm	<b>Playing with Lego: acids and bases</b> <ul style="list-style-type: none"><li>• pH calculations</li><li>• Explaining how buffers work</li></ul>
3.00pm	<b>Strategic structure determination</b> <ul style="list-style-type: none"><li>• Using a logical approach when interpreting Mass Spec, IR and NMR</li></ul>
3.30pm	<b>Review and forward planning</b>
4.00pm	Course ends



## CPD Events in Biology:

- **How to Succeed in Getting Your Students into Medical School**  
Central London: Thursday, 20 June 2013  
*Margaret Royal & Jacqui Thwaites*
- **Avoiding Unforced Errors in A-Level Biology**  
Central London: Tuesday, 11 June 2013  
*Frank Sochacki*
- **Strategies for Success in the Synoptic Questions**  
Central London: Tuesday, 18 June 2013  
*Graham Read*
- **Maximising Achievement & Challenging Students in A-Level Biology**  
Central London: Tuesday, 18 June 2013  
*Frank Sochacki*
- **Leading an Outstanding Biology Department**  
Central London: Thursday, 20 June 2013  
*John Mynett*
- **New to Teaching A2 Biology**  
Central London: Thursday, 20 June 2013  
*Richard Fosbery*
- **AS/A2 Biology: Practical Skills workshop**  
Central London: Tuesday, 25 June 2013  
Central London: Thursday, 21 November 2013  
*Jenny Wakefield-Warren*

- **Teaching Inspiring AS Biology lessons**  
Central London: Thursday, 27 June 2013  
*John Mynett*
- **New to Teaching AS Biology**  
Central London: Friday, 28 June 2013  
Central London: Thursday, 17 October 2013  
*Richard Fosbery*
- **Improving Student Performance in AS/A2 Biology**  
Central London: Wednesday, 3 July 2013  
Central London: Wednesday, 4 December 2013  
*Richard Fosbery & Jenny Wakefield-Warren*
- **A-Level Biology: Raising the Standard Through *Stretch and Challenge***  
Central London: Wednesday 16 October 2013  
*Frank Sochacki*
- **Improving Student Skills in Data Handling and Analysis**  
Online: Wednesday, 13 November 2013  
*Frank Sochacki & Jenny Wakefield-Warren*
- **Using Scientific Enquiry to Improve Pupil Outcomes in Science**  
Central London: Wednesday, 26 June 2013  
*Ed Walsh*



ONLINE

SCIENCE EVENT!

## CPD Events in Physics:

### Relevant for all major specifications

- ***Stretch and Challenge* in A2 Physics – Getting the A\***  
Central London: Wednesday, 19 June 2013  
*Howard Dodd*
- **How to Succeed in Getting Students into Medical School**  
Central London: Thursday, 20 June 2013  
*Margaret Royal & Jacqui Thwaites*
- **Bridging the Gap Between GCSE and AS Physics**  
Central London: Tuesday, 25 June 2013  
*Howard Dodd*
- **How to be an Outstanding A-Level Physics Teacher**  
Central London: Wednesday, 26 June 2013  
*Howard Dodd*
- **Using Scientific Enquiry to Improve Pupil Outcomes in Science** **SCIENCE EVENT!**  
Central London: Wednesday, 26 June 2013  
*Ed Walsh*

### Relevant for OCR

- **Lessons Learned from the 2013 AS and A2 Physics Exams (OCR A)**  
Central London: Wednesday, 16 October 2013  
*Howard Dodd*
- **Teaching AS and A2 Physics for the first time**  
Central London: Thursday, 17 October 2013  
*Howard Dodd*

### Relevant for AQA (A)

- **Lessons Learned from the AQA (A) 2013 AS and A2 Physics Examinations and Practical Assessments**  
Central London: Friday, 18 October 2013  
*Howard Dodd*

### Masterclass: Relevant for A-Level and IB

- **Inspiring Approaches to Difficult Topics for A-Level and IB Physics**  
Central London: Friday, 29 November 2013  
*Keith Gibbs, Dr Aude Alapini-Odunlade  
Dr Cristina Lazzeroni, Dr John Williams*



BOOK NOW! 01869 336410

## HOW TO BOOK

Contact Darren, Zoe and Hayley on **01869 336410** quoting the details requested in this booking form

Book online: simply visit **www.philipallanupdates.co.uk**

Fax this booking form to us on: **01869 337590**

By email quoting the details requested in this booking form to **conferences@philipallan.co.uk**

By post, by completing and returning the form on this page to **Philip Allan Events, Market Place, Deddington, Oxfordshire, OX15 0SE**

Once your booking has been made, a full VAT invoice will be sent to you (subject to availability). Our Terms and Conditions are available on our website. You will also receive an email containing a copy of our Terms and Conditions.

Tickets and final details are emailed approximately 2 weeks before the date of the event.

## INVOICE DETAILS

Delegate name(s)

Job title(s)

E-mail address\*

Establishment name

Address

Postcode

Telephone

Date

Please specify any special dietary requirements

(e.g. vegetarian, vegan, gluten-free)

Purchase order number

\*Your email address is required so we can send you information about your event. We will also register you to receive e-updates about forthcoming events and publications from Philip Allan and Hodder Education.

Please tick if you **do not** wish to receive e-updates ☐

## ANY QUESTIONS?

Contact Darren, Zoe and Hayley on **01869 336410** (at local rates).

## CPD EVENT BOOKING FORM

Course fee (per head plus VAT) **£235**

Event/ Presenter(s)	Location	Date	Number of places
<b>Teaching A-Level Chemistry for the First Time Including <sup>13</sup>C NMR</b> Mike Smith & John Older	Central London	05.06.13	
<b>Teaching Difficult Topics for A-Level Chemistry</b> Mike Smith	Central London	13.06.13	
<b>How to Succeed in Getting Students into Medical School</b> Margaret Royal & Jacquie Thwaites	Central London	20.06.13	
<b>How to be an Outstanding Chemistry Teacher</b> Neil Dixon	Central London	24.06.13	
<b>Challenging Topics at AS and A2 Chemistry</b> Graham Curtis	Central London	24.06.13	
<b>Bridging the Gap Between GCSE and AS</b> Graham Curtis	Central London	25.06.13	
<b>Stretch and Challenge – How to get that A* grade</b> Mike Smith & John Older	Central London	26.06.13	
<b>Using Scientific Enquiry to Improve Pupil Outcomes in Science</b> Ed Walsh	Central London	26.06.13	
<b>Skills and Strategies to Boost Students' Performance in A-Level Chemistry</b> George Facer	Central London	27.06.13	
<b>Stretch and Challenge in A2 Chemistry</b> George Facer	Central London	17.10.13	
<b>Inspiring Approaches to Difficult Topics for A-Level and IB Chemistry</b> Martin Bluemel, Christopher Foster & Tim Jolliff	Central London	17.10.13	
<b>How to Lead an Outstanding Department</b> Rob King	Central London	04.11.13	
<b>New to Teaching A-Level Chemistry</b> Neil Dixon	Central London	27.11.13	
Total			

## FEES

The fee for these events covers all written materials, three-course buffet lunch and refreshments.

Should delegates have any specific dietary requirements please inform Customer Services on 01869 336410.

A cancellation charge of £80 plus VAT will be incurred for any booking cancelled less than 3 weeks before the date of the event. The full fee is payable if you do not cancel your booking and do not attend.

Full Terms and Conditions can be found at **www.philipallanupdates.co.uk**

