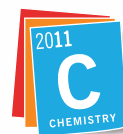
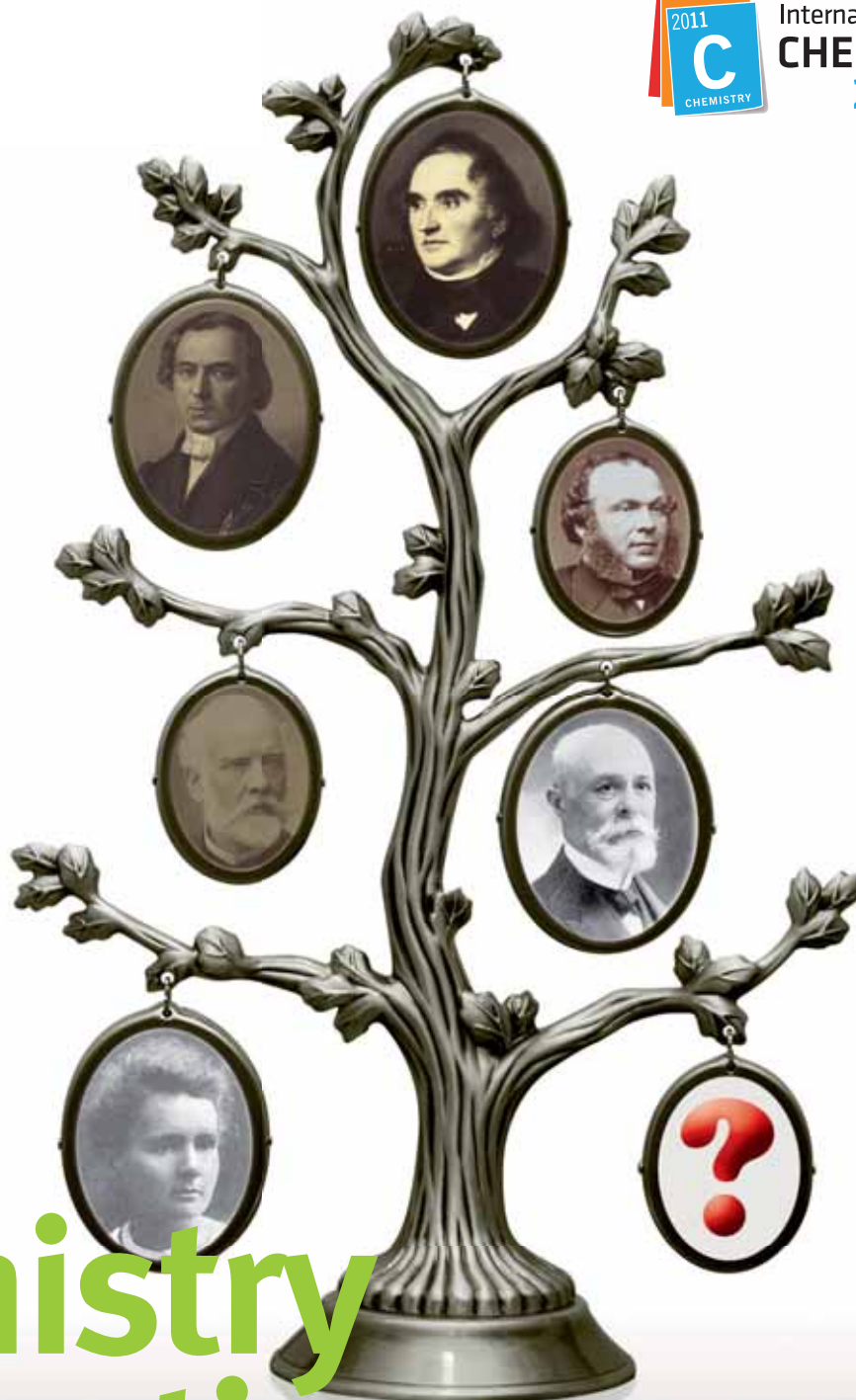


# RSC NEWS

OCTOBER 2011 [www.rsc.org](http://www.rsc.org)



International Year of  
**CHEMISTRY**  
2011



## Chemistry Connections

WHICH HISTORICAL CHEMISTRY FIGURES ARE YOU LINKED TO?

**RSC** | Advancing the  
Chemical Sciences

**NEW  
RSC CEO  
ANNOUNCED**

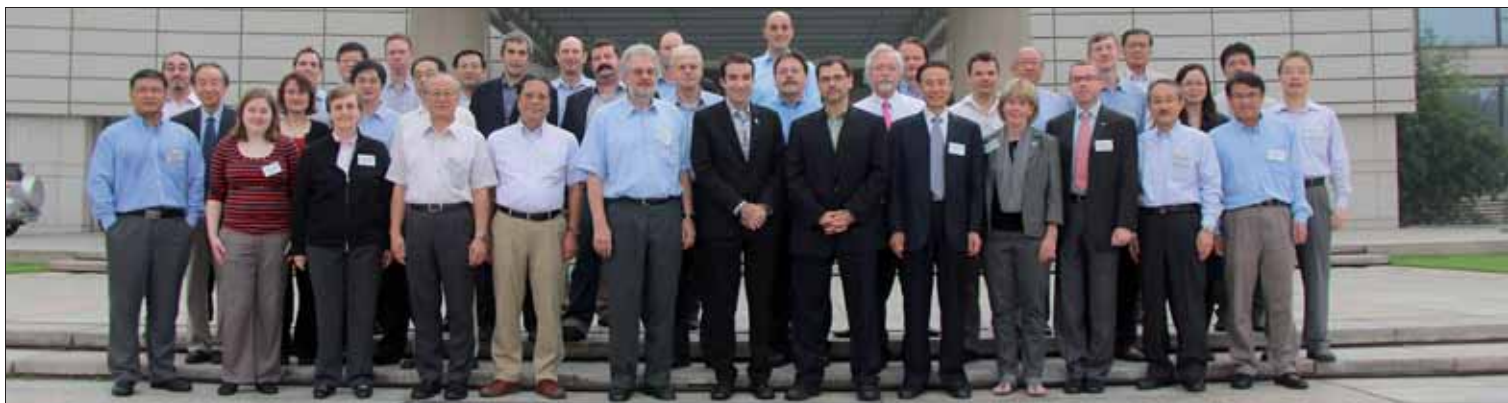
p4



**CHEMISTRY  
BACK AT  
KING'S**

p19





▲ The third annual Chemical Sciences and Society Symposium (CS3) explored the theme of 'Chemistry for Better Health'. This year's summit took place from 13-15 September in Beijing, China. CS3 is a collaboration between an international network of chemical societies and funding organisations. Each summit convenes a small number of internationally recognised researchers in the field in order to stimulate highly focused and strategic discussions. Ben Davis, President of the Chemistry Biology Interface Division chaired the UK delegation. Other UK representatives included Tim Bugg (University of Warwick), Tony Ng (King's College London), John Overington (European Bioinformatics Institute), Neil Cameron (Durham University) and Chris Schofield (University of Oxford).

Last year, the RSC hosted CS3, which had the theme of 'Materials for a Sustainable Global Society'. The RSC will again be working with partnering organisations to produce a white paper on the outcomes of CS3 2011, communicating future priorities for chemical science research relating to human health.



▲ The RSC's new flagship journal, *Chemical Science* was named 'Best New Journal' at a prestigious publishing awards ceremony in September.

The Association of Learned and Professional Society Publishers (ALPSP) praised *Chemical Science* for its relevance and quality.

James Milne, the RSC's Acting Managing Director of Publishing said: "This award is worthy recognition of the incredible efforts of everyone involved in making *Chemical Science* the success it has so quickly become – our authors, reviewers and the journal's dynamic editorial board."

*Chemical Science* publishes original research articles of exceptional significance from across the chemical sciences. Submissions must appeal to the general chemical science community, or be of exceptional interest to specialist researchers. [www.rsc.org/chemicalscience](http://www.rsc.org/chemicalscience)



▲ The RSC has launched two new applications to make it even easier to access chemistry content on the move using Apple mobile devices.

ChemSpider Mobile provides a convenient way to search more than 26 million structures on the ChemSpider online database. You can search by compound name or by drawing structures and the app links directly to your mobile browser to view results in more detail.

With RSC Mobile, you can search journal content, download abstracts and access content marked as free using a personal login. If your organisation or institution has an RSC journals subscription, you can also download full text articles by connecting using their wireless network.

These applications are compatible with any Apple iOS device (iPad, iPhone or iPod Touch) and are available free from the Apple iTunes store.

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Registered Charity Number 207890

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Page Design: Dale Dawson



RSC News is printed on 100% recycled paper

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# snapshot

A look at the latest news from around the world

## Robert Parker named as RSC Chief Executive

Interim Chief Executive made permanent after seven months at the helm



The RSC's Trustees are delighted to announce that interim Chief Executive of the RSC, Robert Parker, has been appointed to this position on a permanent basis.

RSC President David Phillips said: "We saw some very skilled and knowledgeable people through our recruitment process; we are extremely pleased to appoint Robert into the role. We have every faith that, under Robert's leadership, the RSC will continue to thrive and be successful long into the future."

Robert was appointed as acting CEO in March following Richard Pike's resignation.

Robert has worked for the RSC for more than 25 years after joining the organisation in 1985 as an assistant editor. During his tenure, first as editorial director then as managing director of publishing, the RSC's published content almost trebled.

"I am sincerely delighted and honoured to have been selected for this leadership role for the RSC, but

it is not one that I have taken on lightly. There are many challenges facing the chemical sciences, and they come in many forms." Robert speaks passionately about where the RSC's strengths lie in tackling issues such as funding pressures on research, increasing student fees, challenges facing industry as a result of the increasing globalisation of chemistry, and potential changes in business models for scholarly publishing.

"Fortunately, through our growth in size and influence, the RSC is in a fantastic position to face the challenges ahead, not least through our large and committed body of members, many of whom do great things for the RSC and the chemical sciences on a voluntary basis. They are the absolute grass roots of what the RSC is and does.

"We have a terrific chance to turn challenges into opportunities, and that should be our aim."

Robert reflects: "Twenty-six years ago, when I started as an assistant editor on Faraday Transactions and Faraday Discussions, I had no idea where my career would lead. The past seven months as Interim CEO have been a stimulating challenge on a personal level and I recognise I still have a lot to experience and learn. I sincerely look forward to working with RSC Council, staff, members and others in the community to develop the RSC's vision to be foremost in the world at promoting and developing the chemical sciences for the benefit of society."

### IN BRIEF

#### RSC PRIZES AND AWARDS 2012

Do you know a person, team or organisation that has made a significant contribution to advancing the chemical sciences? Nominations are now open for the RSC Prizes and Awards 2012.

With more than 60 categories, the Prizes and Awards cover all areas of the chemical sciences, from research and education to business and industry. Prize and Award winners will win a cash prize, together with a medal or inscribed memento.

Nominations should be submitted online using our electronic form. Detailed information, with specific rules and criteria for each prize and award can be found on the website.

[www.rsc.org/awards](http://www.rsc.org/awards)

#### DATE FOR THE DIARY

The RSC is pleased to announce that next year's 'RSC at the Summer Exhibition' event will be held on 17 July 2012.

## EPSRC Shaping Capability update

As *RSC News* goes to print, representatives from across the physical sciences were due to take part in a 'town hall' style meeting, organised by the Engineering and Physical Sciences Research Council (EPSRC), to discuss their Shaping Capability Programme.

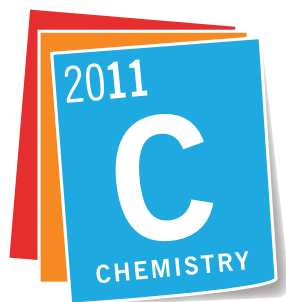
In September's *RSC News*, we highlighted concerns that have been raised by the RSC, and others, about the EPSRC's decision to cut funding for synthetic organic chemistry, changes to support for postgraduate studentships and the degree of consultation that was undertaken.

On 9 September, the RSC met with representatives from the UK's leading scientific bodies, including the Royal Society and the Institute of Physics. Together, the six bodies issued a joint letter, urging the EPSRC to pause to give time for wider consultation and further consideration to the consequences of their funding policy changes.

On 21 September, we were contacted by the EPSRC with a request for information that they should take into consideration as they review other research areas. This should include sources of evidence and information, such facts and figures (for example on PhD destinations), evaluations or reports, and information on the requirements for infrastructure.

If you have information which would help us to formulate our response to this request by the EPSRC, please send this to us by 12 October. We will continue to relay any further developments to members through our website and *RSC Grapevine*.

[shapingcapabilities@rsc.org](mailto:shapingcapabilities@rsc.org)  
[www.rsc.org/shapingcapabilities](http://www.rsc.org/shapingcapabilities)



# International Year of CHEMISTRY 2011

International Year of CHEMISTRY 2011

www.chemistry2011.org

## TRANSFORMING THE CHEMICAL INDUSTRY

Leading industrialists will set out their insights for the future and discuss how companies can gain a competitive edge in a one-day conference on 12 October. 'Innovation to Transform the Chemical Industry' is being jointly organised by the Society for Chemical Industry and the RSC's Management Group as part of the International Year of Chemistry. For more details, see the diary listings on page 29.

## RSC and GSK tackle doping issues at Olympic debate



On the panel were Andy Parkinson, Chief Executive of UK Anti-Doping; Adam Lewis QC, a leading sports author and doping expert; and Ron Maughan, Professor of Sport and Exercise Nutrition at Loughborough University.

The debate was the first in the 'Do More, Feel Better, Live Longer' lecture series organised

by the RSC and GlaxoSmithKline. The next event will be a public lecture about the life and works of Marie Curie, whose research made major contributions towards cancer care. Serge Plattard, Science and Technology Councillor at the French Embassy in London, will give the lecture at the Chemistry Centre on 17 November. Contact the RSC if you would like to attend.

[chemistrycentre@rsc.org](mailto:chemistrycentre@rsc.org)

With the Olympic Games less than a year away, the RSC explored the controversial topic of doping in sport at the Chemistry Centre in September. 'Athletes, Chemists, Law and Sport – Who's Really Winning' discussed the ongoing battles between the covert laboratories developing performance enhancing drugs and the scientists working with sporting authorities to root out the cheaters.

## Celebrate the genius of Michael Faraday in Cardiff

How did it become that Michael Faraday, a man who left school at 13 to become apprenticed to a bookbinder, ended up becoming one of the greatest chemists who ever lived?

Sir John Meurig Thomas will explore the genius of Faraday at this free public lecture for IYC 2011. The event will be held at Cardiff University on 9 November. Sir John, currently Honorary



Professor at the Department of Materials Science and Metallurgy, University of Cambridge, once held the chair of chemistry created for Faraday at the Royal Institution of Great Britain.

The lecture will be chaired by Sir John Cadogan, President of the Learned Society of Wales. For more information, see the diary listings on page 26.

## IYC 2011 EVENTS



### Thames Valley Section Exhibition: Chemistry and Plants

6 October - 23 December, Oxford (see page 28)

### Innovation to Transform the Chemical Industry

12 October at 09:30, London (see page 29)

### What's in my Stuff?

13 October at 18:30, the Chemistry Centre, London (see page 29)

### The Role of Chemists in the Discovery of New Medicines

13 October at 18:00, Nottingham (see page 26)

### Eating Sustainably: Dream or Reality?

25 October at 12:30, the Chemistry Centre, London (page 29)

### Ceremony Commemorating the Work of August Kekulé

28 October at 16:00, Ghent, Belgium (see page 30)

### The Science of Fireworks

4 November at 19:00 and 5 November at 16:00, Cambridge (see page 27)

### The Bigger Bang Show

7 November at 13:00, Norwich (see page 26)

### The Genius of Michael Faraday

9 November at 18:30, Cardiff (see page 26)

### Nuclear Magnetic Resonance: Structure Determination from Buckyballs to Brains

10 November at 18:00, Nottingham (see page 26)

### Secrets of Formulation III

16 November at 09:30, London (see page 30)

### Watts New with Clean Energy? Batteries Included

23 November at 18:30, the Chemistry Centre, London (page 30)

# onetoone

Take advantage of a wide range of member services

The General Assembly is one of the RSC's annual flagship events. Attendance is by invitation only but there are plenty of opportunities for other members to get involved.

The RSC General Assembly provides one of the biggest opportunities of the year for members and network groups to get involved in the strategy and direction of the RSC. The General Assembly functions as an advisory body to the RSC Council. Its role is to provide advice on the strategy, policy and activities of the RSC, providing an avenue for members' views to be represented. It also presents a valuable opportunity for members and RSC staff to network with one another and discuss important topics relevant to the chemical sciences.

This year's General Assembly will be held in Birmingham from 11-12 November. Attendance is by invitation only, but the delegates are representatives from right across the RSC. This includes Local Sections, Interest Groups, the Younger Members' Network,



The General Assembly involves representatives from across the RSC

International Networks, as well as members of RSC Boards and Committees.

#### ■ Wider involvement

Those that haven't been invited to the General Assembly can still contribute by posting any comments, feedback and questions to the General Assembly group on MyRSC.

You will need to be logged in to MyRSC to gain access to the group. Once you have joined, you can see the current discussion topics, files, latest news and information about the Assembly.

Another way to get involved is by passing your comments or questions onto your network, group or section representative. To find contact details for your representatives, visit the membership area of the website. [www.rsc.org/networks](http://www.rsc.org/networks)

#### ■ A packed agenda

The General Assembly will be opened with keynote speeches on the chemical sciences, drawing attention to the relevant current issues facing the sector. Delegates will also be invited to attend two discussion sessions. These will focus on specific aspects of the RSC's work and cover subjects of particular importance to the RSC and its members. The sessions provide an important opportunity for members to provide feedback on RSC initiatives and to share

opinions on behalf of the particular networks and sections they represent.

Meetings will also be arranged between delegates from different networks. This will allow each one to share best practice, develop contacts and have the opportunity to discuss with staff specific support for the members they represent.

In addition to structured meetings and sessions, delegates will be invited to the RSC awards dinner and prize giving ceremony. Furthermore, delegates can find out more about RSC and its network's activities by visiting the exhibition where member groups will have display stands alongside external companies.

#### ■ Keep up to date

The outcomes of the day will be shared with members via RSC News and on MyRSC. The General Assembly is a great opportunity for you to help contribute to the future of the RSC and how activities can be shaped going forward. Contribute now by sharing your views, questions and opinions on MyRSC.

<http://my.rsc.org/groups>

#### ► MORE INFORMATION

Join the General Assembly  
MyRSC Group  
<http://my.rsc.org/groups>  
Telephone  
01223 432254  
Or email  
[ga@rsc.org](mailto:ga@rsc.org)

ENTERPRISING  
INCLUSIVE  
INFLUENTIAL  
PROFESSIONAL  
INSPIRATIONAL  
KNOWLEDGEABLE  
CUSTOMER FOCUSED

#### The RSC needs your views

The RSC Membership Survey closes on 10 October. If you haven't completed the survey yet, or if you did not receive the e-mail invitation, you can follow a static link on the members' section of the website.

[www.rsc.org/membership/rsc-survey.asp](http://www.rsc.org/membership/rsc-survey.asp)

# profile

A closer look at our members and their interests

60  
seconds  
with...

## Laura Yates

Taking a step into events management



**LAURA YATES**  
MRSC

*Laura is a research and development chemist at Quadralene Ltd, a cleaning and infection control product manufacturer in Derby, UK.*

*Laura is also the committee secretary for the RSC Younger Members Symposium (YMS) 2012, which is an initiative of the RSC Younger Members Network.*

*“I’m learning how to communicate effectively with potential sponsors and how to ask for sponsorship.”*

**Q** What does your job involve at Quadralene Ltd?

**A** I work in the Technical Department as a research and development chemist. I formulate many different products such as cleaners and disinfectants for different industries including dental, medical and laboratory industries.

The most satisfying part of my job is to see a product, which I’ve spent months formulating and testing, being manufactured in the factory and packaged and dispatched to a customer.

My day-to-day work varies hugely, which I guess is one reason why I enjoy it so much. One day I can be in the lab carrying out tests on a formulation which I’ve made, the next day I can be working at a customer’s site. I can be researching available technologies at my computer, going to a trade show, studying new regulations, or collaborating with colleagues at a university; very few days are ever the same.

**Q** What’s your experience of the RSC Younger Members Network?

**A** I first became aware of the Younger Members Network in January 2010 when I attended a small chocolate tasting event at Nottingham University. It was a very informal, relaxed event and it was great to find an outlet where I could network with people at a similar stage in their careers as me. I was even able to get some advice from fellow members regarding my two-year CChem Personal Development Programme (PDP). (I actually submitted my final CChem portfolio of evidence this August.)

I was later contacted by the local Younger Members Network who were asking for volunteers to organise the

YMS 2012. The opportunity seemed too good to miss. As I’ve been working towards my CChem I’ve become more aware of my own personal development and I was looking for ways to become a more active RSC member. I had already become an RSC ChemNet Ambassador, working with A-level students.

**Q** What is the Younger Members Symposium?

**A** The YMS is a one-day conference organised by, and for, young scientists (but not exclusively as that would be ageist!). The purpose is really to give early-career chemists the opportunity to present their work to their peers, through posters and oral presentations, in an environment that is less intimidating and more personal and accessible than other conferences. They also get to hear from other presenters, and learn not just about recent advances in chemistry but also about the skills that are required for a successful career in chemistry. The symposium provides a platform for both academic and industrial speakers to present their work on an even footing.

**Q** What are you learning as part of organising such an event?

**A** In my role I’m responsible for meeting minutes and ensuring committee members are up to date with their actions, which is a great experience especially as it’s working with people from different backgrounds compared to those at my company. I’m also learning how to communicate effectively with potential sponsors and how to ask for sponsorship. I’m really enjoying expanding the network of people I work with.

### YOUNGER MEMBERS NETWORK

The Younger Members Network (YMN) provides opportunities for members in the early stages of their career to get involved in a variety of activities and events. They work closely alongside student chemical societies (ChemSocs), local sections and often with RSC representatives at companies. There are Younger Member Networks currently operating in 26 local sections. For more information email us at [networks@rsc.org](mailto:networks@rsc.org) or visit the website. [www.rsc.org/networks](http://www.rsc.org/networks)

The Younger Members Symposium is organised by the YMN. In 2012 it will be held on 13 June at the University of Nottingham. The event is still in the planning stages but to register your interest and for further information email the YMS team. [yms2012.notts@gmail.com](mailto:yms2012.notts@gmail.com) RSC News will publish more information closer to the event.

# MAINTAINING STANDARDS

In common with many other professional bodies, the RSC is introducing a revalidation process to add value and confidence to chartered designations



**Revalidation will provide confidence that chartered chemists are current in their knowledge and practice**

**T**he RSC's Chartered Chemist (CChem) designation is a mark of professional competence. It recognises

practising, experienced chemists who demonstrate an in-depth knowledge of chemistry, significant personal achievements, professionalism in the workplace

and a commitment to maintaining their expertise through continuing professional development (CPD). The high standards required for this qualification are a reflection of the value and regard in which CChem status is held.

The development component to CChem was introduced in 2009. It relates to all Chartered Chemists and was agreed by the RSC Council. From 2012, the RSC will also be implementing a revalidation process for registered Chartered Chemists.

## Why revalidate?

The aim of the revalidation process is to ensure Chartered Chemists sustain an awareness of developments within their field whilst also enhancing the value of CChem status for employers. Bernard Leddy, a Pharmacist from Waterford, Ireland commented: "I have had to do CPD and revalidation exercises with other professional bodies which I am registered with and it always helps you to focus on your professional strengths and weaknesses.

"Revalidation is an essential requirement of continued registration with most professional bodies. Together with CPD, it gives confidence that the professional chemist is current in his knowledge and practice."

## How do I revalidate?

All Chartered Chemists will be required to verify that they are maintaining a professional interest in the chemical sciences. This process will require a randomly selected 2.5% of RSC members who hold CChem status to provide evidence that they are maintaining a professional interest in their field.

The RSC is keen to ensure that revalidation is not onerous or overly-bureaucratic. Chartered Chemists will need to provide a 500-word reflective statement against five broad learning activities such as work-based learning and professional activities. It is for the member to consider how they are maintaining their interest in the chemical sciences. Ideally, members should continue to record their professional development beyond achieving Chartered Chemist status.

The process applies to retired members, although there is a dispensation of only addressing two of the learning activities. Those who maintain an active interest in the work of the RSC, and read its magazines, website and other material, should be able to fulfil the revalidation requirement.

All members who are asked to submit evidence of continuing professional development can seek support from the RSC. However, if they cannot provide such evidence, and if measures to rectify this are not successful, they will be removed from the CChem register.

Revalidations are reviewed by the RSC's Admissions Committee. Claire Gallery-Strong, an Admissions Committee member and Senior Project Manager in the Nuclear Industry, explained why she values being a Chartered Chemist; "I am very proud of being a Chartered Chemist and believe that the opportunity to revalidate allows me to demonstrate that I am still an active chemist. This has become more important to me as my career has taken me further into senior management and away from more hands-on chemistry."

### What Next?

In November, all members will receive their membership renewal form and Chartered Chemists will notice a box to tick in order to verify that they are maintaining standards as associated with Chartered status. Following the receipt of renewal forms, the membership department will randomly select 2.5% of CChem members for the revalidation audit. All members who have been selected for audit will receive the necessary information from the RSC in Spring 2012.

The RSC is currently developing an online system to assist members with CPD which is expected to launch through MyRSC in 2012.

### ◉ MORE INFORMATION

For more information, contact Sarah Harrison, RSC Professional Standards Specialist.  
[cchem@rsc.org](mailto:cchem@rsc.org)  
[www.rsc.org/cchem](http://www.rsc.org/cchem)

## Members' experiences

To reduce the risk of problems when the revalidation process begins next year, the RSC carried out a pilot amongst a small selection of Chartered Chemists.



### Andy Broad CChem MRSC

Director of Research and Development,  
Saufflon CL Ltd.

#### How did you find the revalidation process?

I found the revalidation process straightforward and once I had decided which of the options to follow, it didn't take me very long to complete. The questions I did have, were answered quickly and efficiently by the RSC team.

#### Why do you feel revalidation is important?

I believe that revalidations of this kind are increasingly important for professional bodies in order to maintain standards, and this has been recognised in a number of areas including the medical professions. In addition, going through the revalidation process made me consider both my involvement in science and also what I wanted from my membership of the RSC, which I found beneficial because it is very easy (especially when the subscription is paid by direct debit!) to take these things for granted.



### Anne Dolan CSci CChem MRSC

Lab Team Leader, The Edrington Group

#### How did you find the revalidation process?

I found the revalidation process easy as I already maintain up to date CPD records listing events attended and relevant experience against both CSci competencies and CChem attributes.

#### Why do you feel revalidation is important?

It's important to maintain professional competence and credibility in line with Chartered status in other organisations as well as to ensure my skills and knowledge are kept up to date and relevant.



### Simon Woodbury CChem MRSC

Senior Research Technologist,  
National Nuclear Laboratory

#### How did you find the revalidation process?

I found the revalidation process fairly straightforward – the guidelines identified a range of areas to present evidence in, and it only took an hour or so to prepare a statement identifying suitable activities and experience. It might be useful if a template could be provided to members to keep records between revalidation submissions.

#### Why do you feel revalidation is important?

Revalidation is important as it demonstrates that members with CChem are still practising professionals, maintaining and developing their interest in the chemical sciences. Revalidation ensures CChem is not just an "award for life" and members are undertaking Continuing Professional Development.

# SYNTHETIC SOLUTIONS

Launched last year, ChemSpider SyntheticPages is providing an invaluable resource for researchers who want to find or share synthetic procedures



Traditional academic publishing methods unfortunately cannot always provide all the answers. This can be particularly true for synthetic chemists who want to know or communicate the finer details and associated tricks on how to synthesise a particular compound. “Often, when writing papers, the detail of experiments is a little glossed over,” explained Robert Stockman, Associate Professor and Reader of Organic Chemistry at the University of Nottingham. “This can be partly due to space constraints, but also because of the formal nature of the language in papers.”

To recognise this need, the RSC launched ChemSpider SyntheticPages in 2010, which combined an existing online site – SyntheticPages.org – with the award-winning innovation and infrastructure of the RSC’s ChemSpider database. ChemSpider provides free access to properties and associated information on over 26 million structures. ChemSpider SyntheticPages extends this model to cover reactions, allowing researchers to quickly and easily search and add to a free online database of synthetic procedures.

Stockman leads a research group at Nottingham, Stockman Research, developing methods for the synthesis of molecules of biological and medicinal interest, and was one of the first to upload procedures to the original SyntheticPages site. He said: “When SyntheticPages was first introduced ten years or so ago, by Kevin Booker-Milburn, Steve Caddick and Peter Scott, I was asked if I wished to contribute a few experiments. I thought the idea was really fantastic. SyntheticPages switches the focus to a single reaction, and thus one can really go into detail over the tips and tricks of the mechanics of the reaction.”

### Reliable and repeatable

SyntheticPages brings together data generated by individuals and research groups. The entries on SyntheticPages present an individual’s original laboratory experience of a practical procedure. There is a particular emphasis on reliability and reproducibility: the web-based

format and less-formal approach means that users can often provide a lot more of the finer details than they might in traditional academic papers. For instance, a SyntheticPage can explore areas like frequently encountered problems and trouble-shooting tips when synthesising particular structures. Users can also upload an array of supporting multimedia for their reactions, including images and video footage of procedures, as well as analytical data like NMR spectra.

Quality control is supported by both a team of dedicated editors and also online peer review in the public domain. “What I find interesting is the possibility to leave comments that could allow for the improvement of procedures.” explained Jérôme Husson, an early-career chemist at the University of Franche-Comte. “There is always something to learn from someone else’s experience. From this point of view, SyntheticPages is a unique

---

**“SyntheticPages switches the focus to a single reaction, and thus one can really go into detail over the tips and tricks of the mechanics of the reaction.”**

---

platform to share knowledge on synthetic chemistry that could help to improve reactions.” You can add comments to your own or someone else’s SyntheticPage after it has been posted, such as further technical information, corrections, literature citations or links. A team of editors is on hand to ensure that professional and courteous comments are normally added to pages within 48 hours.

### Why use SyntheticPages?

SyntheticPages has real benefits for chemists at every stage of their career. Stockman commented: “It can become a great learning ground for students who are just learning the ropes of synthetic chemistry, or indeed for the

experienced hand who might pick up some new ideas and techniques.” Browsing the database is easy – searches can be made by looking for structure names or even by using the built-in tools to draw structures and components.

The process is also easy for those uploading their own procedures – generally taking a lot less than an hour from start to finish. “The process of submitting a SyntheticPage is a lot like submitting a paper in some ways, and is a good learning experience for students. I’ll certainly be suggesting to my students that they should contribute some pages,” says Stockman.

For early-career chemists, the ability to publish on ChemSpider SyntheticPages, provides a valuable opportunity to gain more exposure for their work on an open medium. “It allows early-career chemists to make their own work available to the whole chemistry community.” Husson explained, “You can get in touch with someone who is interested in your work and collaborate”. With a permanent digital object identifier (DOI) issued to each page, reactions on Synthetic Pages can be also cited in publications and can make a valuable addition to CVs – allowing potential employers to see examples of work that might not otherwise be published.

### Be part of the community

More SyntheticPages are added each month. Get involved in this growing community – add to existing procedures or upload your own.

### ► MORE INFORMATION

For more information, contact Antony Williams.  
<http://cssp.chemspider.com/williamsa@rsc.org>



**ChemSpider**  
SyntheticPages

# Chemistry Connections

our roots ■ our future



## SCIENTIFIC HERITAGE

Who can you trace your chemistry lineage back to?

**F**or a potential postgraduate student, choosing a PhD supervisor can be as weighty a decision as the project itself. But we should remind ourselves that our supervisors had to make the same decision, as did theirs, as did theirs.

If we map the student-supervisor relationship from a single chemist, it is possible to create an academic lineage. This lineage stretches back through history and provides a timeline of a single student's academic heritage. If we map the lineage of all students, we can create a whole academic genealogy of chemists. This is the purpose of an application hosted on MyRSC called Chemistry Connections. We hope you can help us draw the 'family tree' of chemical scientists and that you

will explore the renowned scientists who you are connected to.

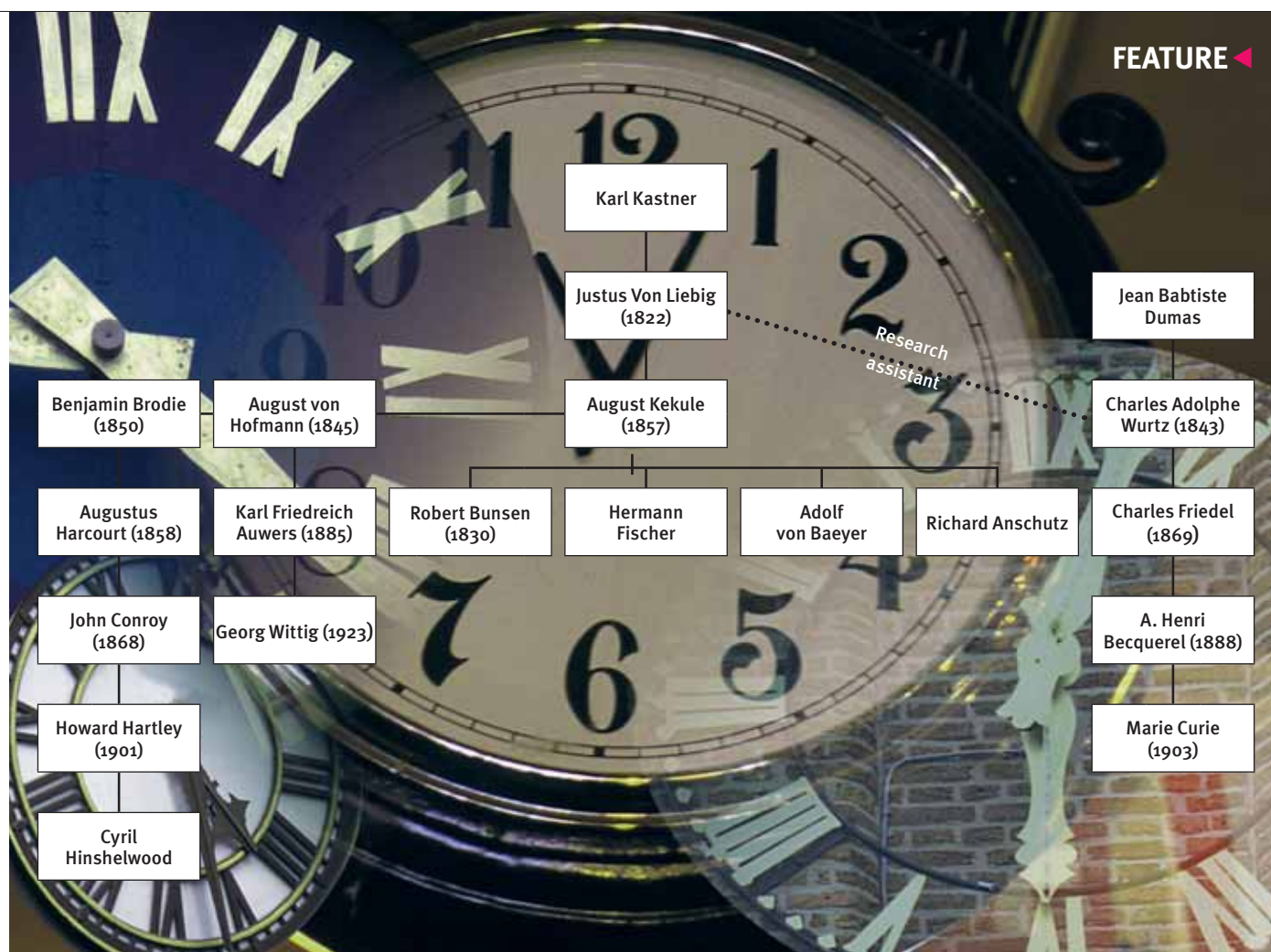
Chemistry Connections is a growing database of over 7,000 academic records, linked through student-supervisor relationships. Each record contains details of when and where a student received their PhD, who they studied under, and also a brief biography. This data has so far been kindly donated from various sources including John Andraos at York University, Toronto, Vera Mainz at University of Illinois, Urbana-Champaign, and the Chemical Heritage Foundation.

The tool has been launched as a beta-version on MyRSC – that is we invite you to test it as early users and to give us suggestions and feedback on how it works. The very nature of a user-defined database

like this means that to be successful the content has to be built by the community; we urge you to get involved. By logging on to MyRSC you can see existing connections and you can add your own to create lineages stretching as far back as your investigations will allow.

### So, who supervised who?

The timeline of the chemical sciences is as complicated as it is fascinating. Certain lineages are more ambiguous because of how the student earned the PhD, for example studying under multiple supervisors. Historically the very concept of the PhD was not as well-defined as it is today, with many scientists becoming influential in different disciplines often outside of science. However, if we keep this in mind and remain flexible, it is



possible to extend a lineage right back to Renaissance period Europe, and also possible to witness the shifts of scientific influence throughout Europe, from Italy, to Germany, to France, to Britain and beyond.

### A piece of history...

As the International Year of Chemistry celebrates the life of Madame Curie, it's a fitting place to begin illustrating a single lineage.

Marie Skłodowska Curie was awarded the Nobel Prize in Chemistry in 1911 for the discovery of the elements radium and polonium. She studied under Henri Becquerel and was awarded her PhD in 1902 at Sorbonne.

Becquerel, who was jointly awarded the Nobel Prize in Physics in 1903 with Marie and Pierre Curie, gained his PhD in 1888 in Sorbonne studying under Charles Friedel.

Charles Friedel, who helped develop the Friedel-Crafts Alkylation reaction with James Crafts in 1877, earned his PhD from Charles Adolphe Wurtz also studying in Sorbonne (Friedel also worked extensively with Louis Pasteur in Strasbourg).

Charles Adolphe Wurtz was well

known for the Wurtz reaction, an organometallic coupling reaction for forming carbon-carbon bonds. He earned his PhD studying under Jean-Baptiste Andre Dumas in 1843 and then worked as a research assistant under Justus von Liebig.

Liebig was an incredibly influential chemist, widely believed to be the founder of the modern laboratory teaching method. He started a company that concentrated meat extracts, later trademarked as Oxo. Liebig earned his PhD in 1822 from the University of Erlangen studying under the supervision of Karl Willhelm Gottlob Kastner.

Another of Liebig's legacies was to supervise many influential chemists including August Kekule (who taught Bunsen, Fischer, Baeyer and Anschutz), August von Hofmann (who supervised Auwers who in turn supervised Wittig) and Benjamin Brodie (who supervised Harcourt at Oxford University, whose great-great academic 'grandchild' is Cyril Hinshelwood).

### Where do you fit in?

Through this, we have linked some of the most significant chemists in

history, providing an insight into academic relationships of their era and following the movements of intellectual influence throughout the world.

But, like an old puzzle, we lack many of the pieces to complete it. How do you, or the chemists you know, fit in? Can you trace your chemistry connections to Curie or Hinshelwood? We need your input.

### How to get involved

We encourage you to trace your own academic lineage, and to help build up a global and historical picture of chemical scientists. Go to the MyRSC group for a guide to getting started on Chemistry Connections. As Chemistry Connections has been launched as a beta version, if you would like to give any feedback or get involved in the curation of the site then please email us.

Log on to the main site: <http://my.rsc.org/chemistryconnections>

Email your feedback: [chemistryconnections@rsc.org](mailto:chemistryconnections@rsc.org)

Find out more on the MyRSC group: <http://my.rsc.org/groups/home/358>

# CAREER HIGHLIGHTS



The RSC's careers fair with a difference, **ChemCareers**, returns at the end of October



**M**ore than 40 top firms will be taking part in this year's RSC careers fair, ChemCareers 2011, which takes place from 31 October to 4 November. Unlike traditional careers fairs, delegates won't have to worry about travel or accommodation, because all the

action will be taking place online, through MyRSC.

This innovative and award-winning approach was started in 2010. ChemCareers 2010 was a huge success, with almost 2,500 people logging onto MyRSC, and this year's event looks set to be even bigger and better.

Since 2011 is the International

Year of Chemistry, this year there'll be a bigger focus on international opportunities, including opportunities to engage with global companies and take part in live web chats with experts in India, China and the USA. You'll also be able to upload your CV onto ChemistryWorldJobs, so that recruiters can view your details and

also allowing you to see new jobs as they come up.

### Something for everyone

ChemCareers can be useful for someone at nearly every stage of their career, from students looking for their first job to those in mid-career coping with redundancy or just looking for a change of direction.

There will be sessions exploring industrial careers, allowing you to discover some of the jobs available within the chemical industry from research and development through to sales and marketing. Alternative career options will be covered, too, showcasing the diverse range of options available for chemical scientists including publishing, teaching or other roles in the public sector. There will also be more general advice on searching and applying for jobs, including tips on CV writing, completing application forms, preparing for interviews, professional development (with information on applying for CChem status) and networking.

Building on the success of ChemCareers 2010, we will once again be running themed days with a focus on particular areas. This year's themes include ChemNet, International, Stepping Away from the Bench, PhDs and Postgraduates, and Career Changers. You can come along each day or just log onto the sessions that interest you.

### Multimedia support

As an online event, ChemCareers makes use of a wide range of multimedia tools to provide delegates with a dynamic and interactive experience. These include videos, online presentations and seminars (webinars), a wealth of downloadable information, and live chat sessions. These online chats, only available to RSC members, will allow you to talk to industry

experts to receive 1:1 careers advice. Streamed live online, the programme of seminars will cover topics ranging from getting into academia to setting up your own business (see box for more details of topics). If you miss the live webinars, don't worry, because they'll be uploaded immediately afterwards to make them available throughout the fair and even after ChemCareers closes. An ecologist, an academic from New Zealand and a member of the British Olympic Committee will be amongst the career profiles featured a series of online videos detailing the many varied career paths available within the chemical science community. There will be nearly 30 videos available, featuring employees from a diverse range of companies, sectors and countries explaining some of the many varied career paths available within the chemical science community.

### How to register

Registration is free and can be done from the ChemCareers MyRSC page. You can also sign up to the ChemCareers MyRSC group to keep up to date with the programme of events.

<http://mv.rsc.org/chemcareers>

## On the agenda

Following delegates' feedback in 2010, we've expanded the number of webinars this year, with topics including:

- How to choose your university
- Alternatives to university
- Options with Chemistry
- Getting involved with the RSC abroad
- Graduate opportunities in the UK
- Using Social Media in your career hunt
- RSC Graduate Scheme
- Beyond a PhD/PostDoc
- Getting into academia
- How to get a paper published
- Continuing Professional Development
- Coping with redundancy
- Setting up your own business
- Networking

## Careers Competitions

Video CVs are becoming more popular with both recruiters and applicants, allowing jobseekers to stand out from the crowd. Upload a one minute video CV on MyRSC and you could win an iPod Touch at ChemCareers.

Postgraduates have also been taking part in a poster competition on MyRSC. Participants have been uploading posters of their research for the chance to win an industry tour and networking evening with Proctor and Gamble. The finalists will be announced on MyRSC in early October.





# Cutting edge science



The RSC's International Symposia on Advancing the Chemical Sciences represent a new generation of global conferences



In 2010, the RSC launched ISACS – the International Symposia on Advancing the Chemical Sciences. The three meetings, ISACS1, ISACS2 and ISACS3, attracted some of the world's foremost chemical scientists as speakers. This year, the RSC built on the success of this, with ISACS4, ISACS5 and ISACS6. Following the format of last year, they were again held in three different continents, over 12 days in total.

The overall aim of the series is to provide cutting edge scientific talks across broad topic areas. See the box opposite for the three themes covered this year. Researchers over a number of interrelated disciplines and different communities are brought together to discuss exciting developments and challenges in their own research domain.



**“There was unanimous agreement [amongst attendees] that this was one of the best conferences any of us have ever attended in the field. It was a spectacular success.”**

James K McCusker,  
Professor of Chemistry  
and Associate Chair for  
Research at Michigan State  
University

The RSC invited almost sixty plenary speakers who are recognised leaders in their field.

Using feedback from delegates in 2010, the format of the conferences evolved this year to include oral abstracts as well as poster presentations. This new addition was well-received and stimulated a significant amount of submissions.

James Milne,



## ISACS 2011

Challenges in Renewable Energy (ISACS4)	Massachusetts Institute of Technology, Boston, USA	5-8 July
Challenges in Chemical Biology (ISACS5)	University of Manchester, UK	26-29 July
Challenges in Organic Materials and Supramolecular Chemistry (ISACS6)	Peking University, China	2-5 September

Publishing Director of the RSC said: "We started ISACS last year, to support the launch of our *Chemical Science* journal. Since then, ISACS has grown from strength to strength.

"We've had some really great speakers this year and have been constantly impressed by the quality of poster presentations."

### Exceptional speakers

The 2011 series opened with Challenges in Renewable Energy (ISACS4) at the Massachusetts Institute of Technology, Boston, USA, from 5-8 July. Delegates were impressed by the collection of exceptional speakers who covered topics ranging from artificial photosynthesis and photovoltaics to hydrogen storage and battery science. James K McCusker, Professor of Chemistry and Associate Chair for Research at Michigan State University, said: "There was unanimous agreement [amongst attendees] that this was one of the best conferences any of us have ever attended in the field. It was a spectacular success."

ISACS4 featured nearly 30 lectures across four days and was preceded by a half-day workshop entitled 'Addressing Challenges in Solar Energy Utilisation Towards Water Splitting', sponsored by RSC journal *Energy & Environmental Science*. Five speakers, selected from the ISACS4 poster abstracts, gave presentations which stimulated lively debate looking at the various research aspects of water splitting.

ISACS4 attracted many enthusiastic young scientists. "I had never been to an ISACS conference before and thought it was quite excellent" explained Karen Mulfort, of Northwestern University, USA. "The Tuesday workshop was particularly unique, and a fantastic opportunity for me to get some feedback on my research". The success of this workshop means that the RSC will be rolling the concept out across future conferences in the ISACS series.

### ISACS in the UK

This year the RSC was delighted to host one of the events in the UK. ISACS5: Challenges in Chemical Biology was held at the University of Manchester from 26 to 29 July. The conference was hosted by RSC President

David Phillips, who awarded Honorary Fellowships to two Nobel Prize Winners, Thomas Steitz and Venki Ramakrishnan (see *RSC News*, September 2011). Delegates from across the globe travelled to the conference, which explored topics at the forefront of chemical biology. One of the speakers, Richard Hartley, from the University of Glasgow, said: "I thoroughly enjoyed the conference, which covered the whole field of chemical biology from the origins of life to modern aging, elucidating, building on and providing alternatives to nature's molecular machinery and organisational structure."

The conference was chaired by the Committee Chairman of the RSC Chemical Biology Interface Division, Hagan Bayley, who commented: "I was delighted with ISACS5. The science was extraordinary, and spotlighted a huge future for the chemistry-biology interface. The size of the meeting was just right, enabling younger scientists to mingle with international investigators who lead their fields."

The organisers at the RSC were also pleased to see ISACS4 and ISACS6 attract a large number of delegates and speakers from the UK. James Barber (Imperial College, London), Peter Bruce (University of St Andrews) and Fraser Armstrong (University of Oxford) were amongst the plenary speakers at ISACS4. David Leigh (University of Edinburgh), Philip Gale (University of Southampton) and Harry Anderson (University of Oxford) were plenary speakers at ISACS6.

### Growing attendances

The last ISACS conference of the year also proved to be the most popular. Over 200 delegates came to ISACS6: Challenges in Organic Materials and Supramolecular Chemistry, which was held from 2-5 September at Peking University.

Nathan Gianneschi, of the University of California said: "The conference really brought together not just top researchers in the field but also people willing to define many of the challenges facing the discipline in general. The talks also spanned an incredible array of topics within this most multidisciplinary field of chemistry, which is very important."



### Supporting activities

ISACS has provided the opportunity for some interesting supporting activities. As well as the workshop on water splitting at ISACS4, the RSC also held the first *Chemical Science* symposium following ISACS6. Featuring six of the main ISACS6 speakers, this was held in Nanjing, China.

### Next year

Plans are well underway for next year's ISACS events, and *RSC News* can reveal that ISACS 7-9 will include Challenges in Organic Chemistry, in Edinburgh, UK, and Challenges in Nanoscience, to be held in China.

### ► MORE INFORMATION

For further details on these events, and the third title in the series, visit the website where you can sign up to receive regular updates on this series. [www.rsc.org/isacs](http://www.rsc.org/isacs)

# opinion

Letters and comments on RSC activities and issues



The six degrees of separation is the idea that anyone in the world can be connected to anyone else by a link of just six people on average (a friend of a friend, and so on...). Modern day networking tools like LinkedIn and Facebook are making social connections even easier to make and understand.

But how are we linked to the historical figures of the past?

The launch of Chemistry Connections on MyRSC (see page 12) allows chemists to explore their academic lineage back in time. It should also build a comprehensive picture of how the chemistry community is evolving geographically, and help us see the trends of academic mobility up to the present day.

We invite you to explore how you are linked to chemists both past and present, and at *RSC News* we would be delighted to hear your stories of who you can link your academic heritage to.

*Sheena Elliott*

Sheena Elliott  
RSCNews@rsc.org

## We can't get by without maths

John Crompton is right to be worried about the mathematics deficit, and not just among chemists (Are we mathematically challenged? *RSC News*, August 2011).

Teaching physical chemistry, I am only too aware of the handicap faced by the one-third of first-year undergraduates who do not have A-level mathematics. It isn't just about understanding essentials like logarithms and calculus: it's about confidence and speed in using quite simple mathematical operations such as changing the subject of a formula.

But the mathematics deficit goes further than chemistry, because only 15% of people study A-level mathematics. The large majority give up any form of maths at the age of 16 and never study it again. England, Wales and Northern Ireland are bottom among developed countries in the proportion of people who study mathematics past the age of 16, and this is in a world where most areas of academic study and the workplace have steadily increased their quantitative demands.

Carol Vorderman's recent report on mathematics education called for all students to continue with some form of mathematical study beyond the age of 16, and the Secretary of State endorsed this ambition – but over a decade.

Can we wait that long? We do no-one any favours by pretending that mathematics is something you can get by without in the modern world.

**Sir John Holman CChem FRSC, University of York**

## Thanks for your contributions

I'd like to take the opportunity to thank everyone that has sent in their comments, taken part in meetings, or left feedback on MyRSC about the UK Chemistry Landscape (see *RSC News* August 2011).

Using your feedback, we will develop the proposals into a report through further consultation with key stakeholders including the RSC Division Councils and the Science, Education and Industry Board.

Once the report has been finalised, we will share the details with members. Of course that won't be the end of the project. I hope that working together we can ensure the decision makers pay attention, put our recommendations into action and help to deliver a bright and sustainable future for the chemical sciences in the UK.

**Mario Moustras CSci CChem MRSC**  
**RSC Manager, Higher Education, Business and Industry**

*RSC News* welcomes letters, which should be concise (normally less than 300 words) and timely. Those selected for publication are subject to editing for clarity and length. Letters should be marked 'for publication'; letters are not routinely acknowledged. [rscnews@rsc.org](mailto:rscnews@rsc.org)



# Chemistry is back at King's

The new department at King's will have a new biomedical emphasis

King's College London was one of several universities to close its chemistry department in 2003. This was indicative of a wider crisis in chemistry in the UK, with insufficient student demand for the subject.

So I'm now delighted to be part of a team building a new chemistry department at King's. Does this show a more general resurgence in the country's academic chemistry? As judged by dramatically increased student demand, I would say yes. Our colleagues across London report their chemistry courses are over-subscribed by students obtaining AAA grades, or better, and I am pleased to hear about departments returning budget surpluses.

I've watched chemistry research blossom at King's since 2003. Newer areas such as medical imaging, nanotechnology, materials science, biopharmaceuticals and chemical biology all require strong chemistry. Analytical and medicinal chemistry have continued as strong fields, but these disciplines

are also evolving with new relationships developing between pharma and academia to support the model of 'open innovation'. I think opportunities for academic chemists have increased, but many working in these fields are finding they need more biomedical knowledge and clinical contacts.

King's actually has around 50 academics within the biomedical or physics departments who pursue chemical research. It is they who have created the impetus for a new department of chemistry, and for a new four-year MSci course in 'chemistry with biomedicine'. This is surely a positive sign that they also believe there are great opportunities for chemists in the life sciences, and there is a need to teach chemistry with this emphasis.

Our diaspora of practicing chemists have been affiliated to a substantial virtual chemistry department. The new core chemistry department is needed to provide an identity and voice for chemistry at King's, to set a



**Roger Morris is Professor of Molecular Neurobiology at King's College London and Head of the School of Biomedical Sciences.**

standard and value for chemistry as a discipline independent of its applications. Excellence in applications can only be sustained if there is continuity in disciplinary excellence: chemistry for its own sake.

The course will be a fundamental chemistry course, but we will teach chemistry within biological contexts; the Second Law of Thermodynamics still rules, and can therefore be understood in many systems. The biomedical emphasis will expose our students to the wide variety of new applications, so their perspectives are broadened as they acquire a strong chemistry skill base, stimulating them to consider a wide range of career options. We are designing it in consultation with the RSC to meet their criteria for accreditation.

I think that the return of chemistry as a department and course at King's reflects that chemistry in the UK is adapting to new challenges, and I am excited that King's will again play a key role in this.

# RSC Policy Bulletin

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*The RSC's response to the government inquiry into the closure of the FSS*

## Saving school science experiments

The RSC has produced new guidance for schools and education authorities concerning the impact of REACH

Of great concern to the RSC is that schools in parts of Europe are being instructed to stop using some chemicals that are commonly used to enhance chemistry teaching. The RSC has therefore been working with UK authorities to provide sensible guidelines for the way health and safety legislation is interpreted and applied in the UK.

Contrary to popular belief, health and safety laws do not restrict teaching practical chemistry in the UK, provided that adequate steps are taken to ensure that such activities can be carried out safely. Anecdotal evidence suggests that fear of litigation has led to some local education authorities, school governing bodies and teachers to use health and safety legislation as an excuse to avoid teaching some important practical chemistry skills.

In September, *RSC News* featured an update on the implications of the REACH Regulation (the Registration, Evaluation,

Authorisation and Restriction of Chemicals). The Regulation makes it illegal to manufacture or supply substances within the EU that have not been registered with the European Chemicals Agency by a specified date. In addition, the Regulation places new controls on hazardous substances which are deemed to be of 'Very High Concern' (SVHCs). These substances are placed on an 'Authorisation List' under Annex XIV of the Regulation. Member states of the EU may nominate potential new candidates for this list, and after a specific period of time, known as the 'sunset date', use of new SVHCs on the list becomes prohibited without specific authorisation for a particular application.

Since the implementation of REACH, some chemical distributors have threatened to stop supplying SVHCs to schools. Of greater concern to the RSC and others was a recent decision made by the Irish Department of Education and Skills instructing schools to discontinue using any SVHCs used in teaching and to arrange for these to be collected for disposal.

About 1,600 chemicals are known to have properties that could lead to them being classified as SVHCs. Among the substances of concern used in practical teaching in schools, colleges and universities are boric acid, chromium and cobalt compounds. These chemicals have many uses including diagnostic tests,

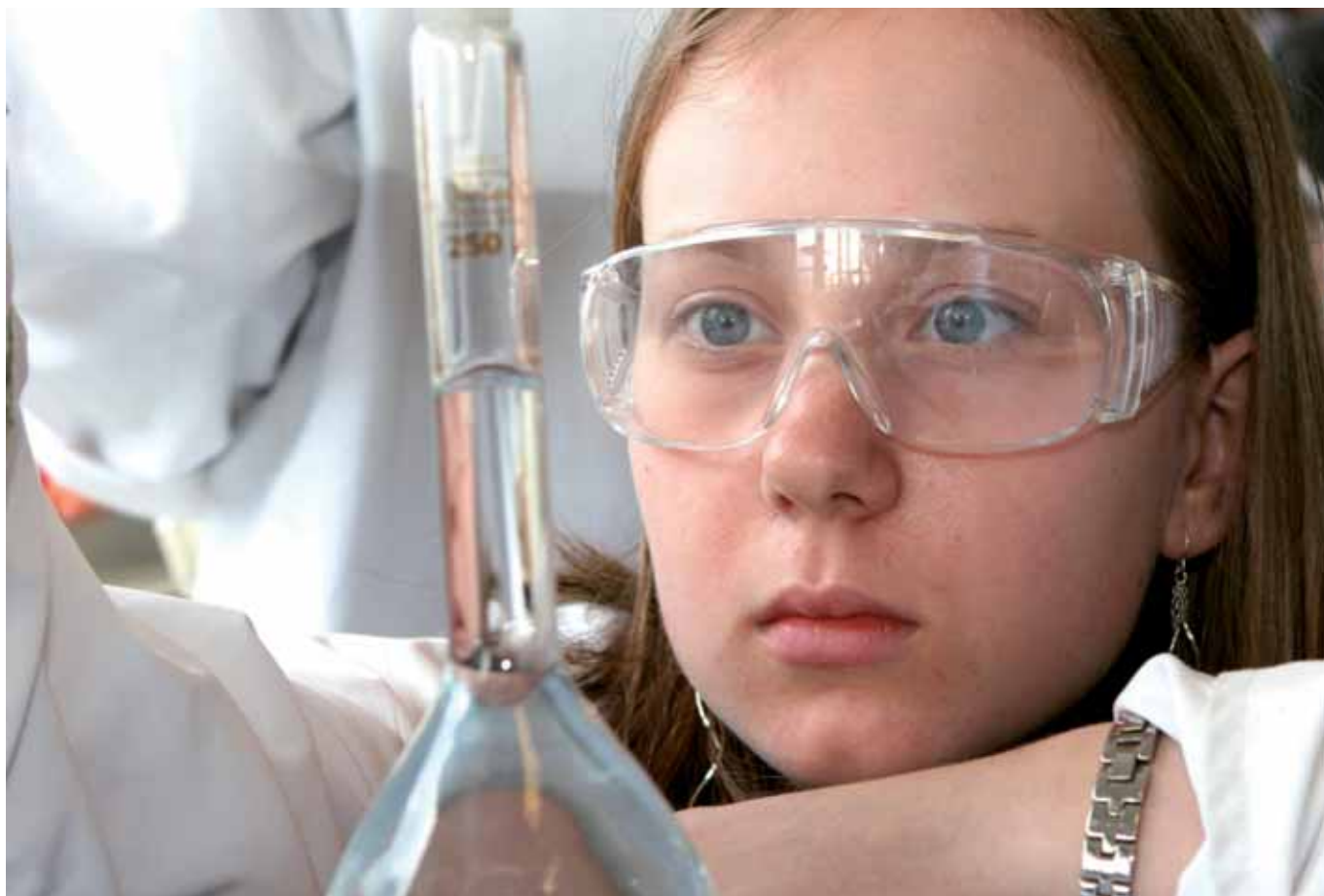
## Partnering with other organisations

The RSC has met with UK authorities to clarify the implications of health and safety legislation for schools. This was done in partnership with the following leading educational organisations.

CLEAPSS is an advisory service providing support in science and technology for a consortium of local authorities and their schools in England, Wales and Northern Ireland.

The Scottish Schools Education Research Centre is a consortium of the 32 Scottish Education Authorities, providing services to elected members and officers of local authorities, teachers, student teachers and technicians.

The Association for Science Education is a dynamic community of teachers, technicians, and other professionals supporting science education.



for calibrating instruments, and for analysing mixtures to show how one substance can be converted to another. They illustrate the basic principles of chemistry and the chemical properties of the elements and their compounds.

### **REACH and education**

The RSC, and several notable educational organisations – CLEAPSS, the Scottish Schools Education Research Centre (SSERC) and the Association for Science Education (ASE) (see box opposite) – have significant concerns about the continued availability of some SVHCs and the impact their withdrawal may have on teaching practical chemistry. The RSC and its partner organisations met with the UK REACH Competent Authority and the Department for the Environment, Food and Rural Affairs (DEFRA) to clarify the issue of SVHCs covered by REACH. Following these discussions, it is our informed view that REACH should not prevent or limit the supply or use of chemicals for teaching and learning purposes in the UK.

Whilst Annex XIV restricts the use of SVHCs, Article 56(3) of the Regulation provides an exemption from the authorisation requirement

for chemicals used in scientific research and development. Scientific R&D is defined as any scientific experimentation, analysis or chemical research carried out under controlled conditions in a volume less than one tonne per year. This, in our view, covers the activities included in teaching practical chemistry and therefore removes the requirement for the authorisation of chemical substances used for practical teaching purposes. It is also important to note that none of these substances have yet been added to Annex XIV of the Regulation, so no 'sunset date' has yet been set to restrict their use. Therefore, chemicals currently on the market, including most SVHCs, may be used to teach practical chemistry.

### **Misinterpretations**

The misinterpretation of REACH is just one recent instance of regulations being used as an excuse to stop supplying chemicals in schools, which erodes teaching practical chemistry. The REACH Regulation is essentially hazard-based, concerned with the intrinsic harmful properties of substances. The actual risk a substance poses is dependent on the amount and concentration of that substance and

the length of exposure to its hazardous properties. In schools, colleges and universities, practical chemistry is taught under controlled conditions and generally involves using small amounts of chemicals or dilute solutions; therefore the risks are low.

The RSC continues to advise that practical chemistry, as evidence shows, does not and has not posed a significant risk to pupils. It is our view that laboratory work is an essential element in pupil learning which cannot be adequately replaced by other approaches. It enables pupils and students to develop key manipulative and problem solving skills, which higher education institutions and industry continually stress to be of vital importance. It also provides a vital opportunity for pupils to learn how to safely handle chemicals and to develop a balanced, reasoned understanding of the chemical world around them.

### **More information**

For more information on this topic, and other implications of REACH, contact Steven Lipworth, RSC Environmental Health and Safety Policy Advisor.  
[lipworths@rsc.org](mailto:lipworths@rsc.org)

# Forensic Science at risk

The RSC has responded to the House of Commons Science and Technology Select Committee inquiry into the closure of the Forensic Science Service and continues to raise several concerns

From the crime scene to the court room, the Forensic Science Service (FSS) plays a leading role in providing analysis and interpretation of evidence in all criminal areas to police forces and other organisations. It works on more than 120,000 cases per year and employs 1,300 scientists.<sup>1</sup>

In December 2010, the government announced its intention to wind down the FSS (a government owned company) by March 2012. It cited operating losses of £2 million per month and a

predicted decrease in the size of the market for forensic services. These proposals led to a House of Commons Science and Technology Select Committee inquiry into the closure, and the RSC presented written evidence following consultation with members and a number of experts.

The Select Committee published its report in July 2011,<sup>2</sup> highlighting many of the issues raised by the RSC, especially concerning the integrity of analytical work. The RSC strongly agrees with the report's

criticism of the winding down of the FSS, and shares the committee's concerns that the March deadline for closure is not realistic. This will not allow sufficient time for the further consultation which is required to enable the formulation of a wider strategy for forensic science. However, it is the closure of the FSS and not the speed of closure which is the real issue. The report includes a number of recommendations that are critical to the future of the FSS.

## Investment in research and development

A major concern raised in the report, and shared by the RSC, is that no formal assessment was made of the impact of closing down the FSS on forensic science research before the decision was made and announced. The UK is currently a world leader in the provision of forensic science services, but to maintain this position, there must be continued investment in research and development. This is also essential if



law enforcement agencies are to stay ahead of developing criminal tactics, including those used for drugs and terrorism offences. This includes, for example, lower detection limits to enhance the specificity of detection techniques and to ensure that new designer drug and explosives residues can be detected.

Whilst some areas of forensic science provision are highly complex and therefore expensive and not profitable under current procurement strategy, they are essential to the fight against crime and criminal justice. This must be recognised and addressed by the government in formulating future strategy for the provision of forensic science.

How the R&D function will be carried out post-closure is unclear, yet this is critical to develop future innovative analytical techniques.

### Losing our expertise

The closure of the FSS will result in the loss of a significant source of scientific expertise in the UK with wider implications for the Criminal Justice System. The sector needs a supply of talented scientists who are capable of advancing the science. A properly resourced unit with specialist capabilities and an advanced skills base must be retained in the UK. Unless a planned alternative is implemented, the closure of the FSS would mean that the UK could suffer an erosion of its skills base in this area.

### Recent developments

The RSC understands that the government is allowing police forces to re-tender any work currently undertaken by the FSS. This means that the opportunity to sell the business with an income stream will be seriously reduced. Accreditation issues, such as the approval for all new police breathalysers and hand-held drugs screening devices (currently done at the FSS), will have to be put on hold for a year until another lab can be accredited. In addition, the government must ensure that any private forensic science provider has achieved accreditation to ISO 17025. If a sufficient match in quality standards cannot be met elsewhere, the government should, at the very least, reconsider the March 2012 closure deadline. The needs of criminal justice must come



before considerations of financial convenience.

The RSC's Chief Executive Officer, Robert Parker said: "Science keeps us one step ahead of criminals, and vital crime-fighting tools like DNA fingerprinting wouldn't exist today without the research expertise at the Forensic Science Service."

Keeping that advantage should be the central goal of the Government's forensic science plans.

The stabilisation of the external

forensics market is now of crucial importance and the RSC has written to the committee chairman, Labour MP Andrew Miller, to ask that the implications of the re-tendering of the FSS to be considered as a matter of urgency.

### REFERENCES

1. [www.forensic.gov.uk/html/customers/](http://www.forensic.gov.uk/html/customers/)
2. [www.publications.parliament.uk/pa/cm201012/cmselect/cmsctech/855/85502.htm](http://www.publications.parliament.uk/pa/cm201012/cmselect/cmsctech/855/85502.htm)

## In summary

The RSC responded to a House of Commons Science and Technology Select Committee inquiry into the closure of the UK Forensic Science Service (FSS), and the Select Committee published a report in July. The RSC has expressed the following concerns.

- The closure of the FSS could adversely impact the UK's leading position as a provider of forensic science services, unless a strategy for investment into forensic science R&D is put in place.
- The closure of the FSS will result in the loss of a significant source of expertise in the UK with

wider implications for the criminal justice system.

- If police forces are allowed to re-tender work currently undertaken by the FSS, this will seriously reduce the opportunity to sell the existing FSS with an income stream and a skilled workforce.
- The FSS currently approves devices such as breathalysers and drugs screening devices; another laboratory will need to be accredited before such approvals can continue.

# diary

YOUR GUIDE TO  
ALL IMPORTANT EVENTS

## Announcing

### 3rd Dalton Transactions International Symposium: Bioinorganic Chemistry

14 & 16 November 2011

Osaka University and Kyushu  
University, Japan

[www.rsc.org/DTIS3](http://www.rsc.org/DTIS3)

### Directing Biosynthesis III

19-21 September 2012

University of Nottingham, UK

Call for oral abstracts – submit  
now

[www.rsc.org/DBIII](http://www.rsc.org/DBIII)

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## Major conferences

### ICPOC21: 21st IUPAC International Conference on Physical Organic Chemistry

9-13 September 2012

Durham University, UK



#### Call for oral abstracts – submit now

The 21st IUPAC Conference on Physical Organic Chemistry is the latest in the leading international conference series on physical organic chemistry and chemical reactivity. ICPOC 21 will consist of plenary, invited and contributed lectures, as well as poster sessions. In addition to the plenary sessions, there will be three parallel sessions over the five days. Key topics that will be covered in the meeting include:

- Physical underpinnings
- Mechanism and catalysis
- Supramolecular and systems chemistry

This symposium will be an opportunity to discuss and celebrate the current status, the development and the future of physical organic chemistry, bringing together a broad range of scientists from across the whole community who share a quantitative perspective on chemistry.  
[www.rsc.org/ICPOC21](http://www.rsc.org/ICPOC21)

### Lipids and Membrane Biophysics: Faraday Discussion 161

11-13 September 2012

The Chemistry Centre, London, UK

#### Call for oral abstracts now open – submit by 18 November 2011

One of the key challenges in biophysics and chemical biology is gaining an understanding of the underlying physico-chemical basis of the highly complex structure and properties of biomembranes. This Faraday Discussion will consider recent developments in the study of biomembrane structure, ordering and dynamics, with particular emphasis on the roles of lipids in these phenomena.

#### Themes:

Lipid self-assembly; structure, ordering and dynamics of membranes; lateral segregation, trans-bilayer coupling and microdomains; membrane curvature, micromechanics and fusion; lipid-protein interactions: two-way coupling; Interactions of signalling lipids and other molecules with membranes; biomedical and technological applications of lipid membranes.

Join this discussion to review recent theoretical and experimental advances in biomembrane research, and how developments in imaging, spectroscopy and scattering can lead to new insights. Prospects for the development of novel membrane-based biomedical and technological applications will also be explored.  
[www.rsc.org/FD161](http://www.rsc.org/FD161)

## DATES AND DEADLINES

### Industrial Advisory Boards Workshop

19 October 2011

The Chemistry Centre,  
London, UK

Registration – deadline  
10 October 2011

[www.rsc.org/IAB](http://www.rsc.org/IAB)

### CrystEngComm Symposium

4 November 2011

The Chemistry Centre,  
London, UK

Registration – deadline  
21 October 2011

[www.rsc.org/  
crystengcommsymposium](http://www.rsc.org/crystengcommsymposium)

### School Teacher Fellows: A valuable and versatile resource

18 November 2011

The Chemistry Centre,  
London, UK

Registration – deadline  
31 October 2011

[www.rsc.org/STFconf](http://www.rsc.org/STFconf)

### 1st PACN Congress on Agricultural Productivity: How the chemical sciences can help to feed the world

21-23 November 2011

Accra International Convention  
Centre, Accra, Ghana

Registration – deadline  
17 October 2011

[www.rsc.org/pacn2011](http://www.rsc.org/pacn2011)

#### MORE INFORMATION

To find out more about any  
event on this page, see  
[www.rsc.org/events](http://www.rsc.org/events)

Call +44 (0) 1223 43 2254/2380  
Or email [events@rsc.org](mailto:events@rsc.org)

## Diamond: An Engineering Material for the 21st Century

See listings below



## Events

### FURTHER INFORMATION

The RSC News Diary this month lists RSC events from October to 28 November 2011 that are held on the RSC conference database. Further details on any of these meetings can be obtained from the named contact or from the conference website at

[www.rsc.org/ConferencesAndEvents/conference](http://www.rsc.org/ConferencesAndEvents/conference)

Type in the specific ID number for each event in the search box.

You can also browse events by type, organiser or region.

### SCOTLAND

#### Mid-Scotland Section

#### Top of the Firm 2011

28 October at 19:30  
ID=108969

Leapark Hotel, Grangemouth  
The annual light-hearted competition for the coveted Top of the Firm trophy.

Contact Terry Howe  
t 01786 451740  
e tvhowe@lineone.net

#### 2011 Top of the Bench

9 November at 18:30  
ID=109190

Falkirk Campus, Forth Valley College  
A practical competition for secondary schools for the Top of the Bench trophy and the honour of representing Mid-Scotland in the national finals.

Contact Claude Penman  
e cpenman@supanet.com

#### The First World War – Its Chemical Origins

10 November at 14:00  
ID=109188

Forth Valley College, Falkirk Campus  
Alan Dronsfield, RSC Historical Group, explores the links between the chemical industry and the development and use of chemical agents in the Great War

Contact Mark Dennis  
t 01324 494554  
e mark\_1dennis@hotmail.com

#### The First World War – Its Chemical Origins

10 November at 19:00  
ID=109189

Ineos Exhibition Centre, Grangemouth  
See listing above

#### Other Events

#### Industry and Technology Division

#### Industry Hour

15 November at 18:30  
ID=108926

Jury's Inn, Edinburgh  
Part of a series of free 60 minute lectures designed

to help you get ahead in the corporate chemical science community.

Contact Aurora Antemir, RSC  
e industry@rsc.org

### WALES

#### Mid-Wales Section

#### Lecture: An Analysis of the Fukushima Accident and its Implications

6 October at 17:15  
ID=109054

Aberystwyth University  
• Dr Tony Wickham, consultant in nuclear chemistry

Contact Jen Horgan  
t 01974 241333  
e jeh@aber.ac.uk

#### Lecture by Dr Alun Price

10 November at 17:15  
ID=109184

Aberystwyth University  
• Dr Alun Price, Mid Wales Local Section Committee  
A lecture on Frederick Soddy, Aberystwyth 1894; Nobel Prizewinner 1921

Contact Jen Horgan  
t 01974 241333  
e jeh@aber.ac.uk

#### North Wales Section

#### Analytical Division – North West Polymer Physics Group

#### Lecture at Bangor University with Prof Steven Howdle

11 October at 16:15  
ID=108935

School of Chemistry, Bangor University  
Prof Howdle's interests lie in the use of supercritical carbon dioxide as a new solvent for polymer

synthesis and materials processing.

Contact Hongyun Tai  
t 01248 382375  
e chemadmin@bangor.ac.uk

#### South East Wales Section

#### A Photochemical Phenomenon: Semiconductor Photocatalysis

10 October at 16:00  
ID=108722

Cardiff University, School of Chemistry  
• Prof Andrew Mills, Queen's University Belfast  
Contact James Redman  
t 02920 876273  
e redmanje@cardiff.ac.uk

#### Structure and Reactivity of Electronically and Coordinatively Unsaturated Complexes

17 October at 16:00  
ID=108723

Cardiff University, School of Chemistry  
• Dr Deborah Kays, University of Nottingham  
Contact James Redman  
t 02920 876273  
e redmanje@cardiff.ac.uk

#### DFT and QM/MM of Transition Metal Complexes, Actinides

7 November at 16:00  
ID=108724

Cardiff University, School of Chemistry  
• Prof Michael Bühl, University of St Andrews  
Contact James Redman  
t 02920 876273  
e redmanje@cardiff.ac.uk

#### A Guilty Approach to Mixed Valence Compounds

14 November at 16:00  
ID=108814

Cardiff University  
• Dr Corinna Hess, Durham University  
Contact James Redman  
t 02920 876273  
e redmanje@cardiff.ac.uk

#### Diamond: An Engineering Material for the 21st Century

21 November at 16:00  
ID=108815

Cardiff University  
• Dr Mark Newton, University of Warwick  
Contact James Redman  
t 02920 876273  
e redmanje@cardiff.ac.uk

#### South Wales West Section

#### Science & Energy Demonstrations for Schoolchildren

18 October at 10:00  
ID=108942

University of Wales, Trinity St. David  
A series of experiments relating to chemical energy, demonstrated for the benefit of school children.

Contact Neville Jones  
t 01269 850815  
e dnj.derwydd@mac.com

#### Science & Energy Demonstrations for Schoolchildren

18 October at 13:00  
ID=108945

University of Wales, Trinity St. David  
See listing above


**Science & Energy Demonstrations for Schoolchildren**  
19 October at 10:00  
ID=108943  
University of Wales, Trinity St. David  
See listing above

**Science & Energy Demonstrations for Schoolchildren**  
19 October at 13:00  
ID=108944  
University of Wales, Trinity St. David  
See listing above

**Sustainable Energy Supply – Hydrogen Fuel for the Future?**  
11 November at 19:30  
ID=108946  
Memorial Hall at Christ College, Brecon  
• Jon Maddy, University of Glamorgan  
Contact Bill George  
t 01792 406994  
e wogeorge@glam.ac.uk


**Sex, Lies and Nanotechnology**  
18 November at 12:45  
ID=108947  
Gower College, Swansea  
• Prof Jon Preece, University of Birmingham  
Contact Bill George  
t 01792 406994  
e wogeorge@glam.ac.uk

**Other Events**


**Learned Society of Wales**  
 **The Genius of Michael Faraday**  
9 November at 18:30  
ID=109262  
Cardiff University  
• Prof Sir John Meurig Thomas, University of Cambridge  
A lecture celebrating the life of Michael Faraday, who left school at 13 but ended up becoming one of the greatest chemists who ever lived.  
Contact Lynn Williams  
e lewilliams@lsw.wales.ac.uk

**MIDLANDS**

**East Midlands Section**

 **The Role of Chemists in the Discovery of New Medicines**  
13 October at 18:00  
ID=108451

University of Nottingham  
• Dave Alker, chemistry recruitment and training consultant, formerly of Pfizer Ltd  
This lecture aims to illustrate how the field of medicinal chemistry is leading to the discovery of new medicines.  
Contact Samantha Tang  
t 0115 8467229  
e samantha.tang@nottingham.ac.uk

 **Nuclear Magnetic Resonance: Structure Determination from Buckyballs to Brains!**

10 November at 18:00  
ID=108452  
University of Nottingham  
• Simon Puttick, University of Nottingham  
This lecture will introduce the audience to nuclear magnetic resonance techniques and their uses in modern science with the aid of some less than conventional applications.  
Contact Samantha Tang  
t 0115 8467229  
e samantha.tang@nottingham.ac.uk

**Other Events**

**Developing Expertise in Practical Chemistry – For Newly and Recently Qualified Chemistry Teachers**  
13 October  
ID=109003  
University of Nottingham  
This one-day course aims to support newly and recently qualified chemistry teachers of 11-18 year olds. In association

with the Science Learning Centre East Midlands  
Contact Sue Bull  
t 0116 2523771  
e slcem@le.ac.uk

**Chemistry for Non-Specialists KS4**  
18-19 October  
ID=108995

Caludon Castle School, Coventry  
This four-day course aims to raise confidence and expertise in teaching chemistry amongst non-specialist school science teachers.  
In association with Science Learning Centre West Midlands  
Contact Science Learning Centre West Midlands  
t 01782 734429  
e enquiries@westmidlands.slcs.ac.uk

**Radiochemistry Group Geological Disposal of Radioactive Waste: Underpinning Science and Technology for Radioactive Waste**

18-20 October  
ID=108406  
Loughborough University  
In association with: Geological Society, the Institution of Civil Engineers, the Nuclear Institute, the Institution of Chemical Engineers, the Royal Academy of Engineering and the Mineralogical Society  
Contact Nick Evans  
t 01509 222564  
e n.d.m.evans@lboro.ac.uk

**British Carbon Group Modelling and Measuring Reactor Core Graphite and Performance**

31 October – 3 November  
ID=108681  
Conference Aston, Birmingham  
Third in a series concerning the irradiation behaviour of nuclear graphite.  
In association with the Institute of Physics and

the Society of Chemical Industry  
Contact Anthony Wickham  
t 01597 860633  
e confer@globalnet.co.uk

**EASTERN**

**Essex Section**

**Chemistry at Work**  
18-19 October  
ID=108982

London Cruise Terminal, Tilbury  
In association with the Institution of Chemical Engineers  
Contact Ron Rattenbury  
t 01268 542583  
e ronald.w.rattenbury@btinternet.com

**Chemical Detectives – Putting Spectroscopy to Work**

19 October at 14:00  
ID=108867  
Newham College of Further Education  
• Dr Alan Osborne  
Contact Julian Cass  
t 0208 2574567  
e julian.cass@newham.ac.uk

**Chemistry Mastermind Heats**

November 2011  
ID=108901  
• Quizmaster: Dr Alan Osborne  
A series of events to be held during November.  
Contact Alan Osborne  
t 0208 5902021

**Lecture/Seminar: Using Single Molecules and Ensemble Techniques to Investigate Protein Folding Energy Landscapes**

17 November at 13:00  
ID=108868  
University of Essex  
• Prof Jane Clark, Department of Chemistry, University of Cambridge  
Contact Jody Mason  
e jmason@essex.ac.uk

**East Anglia Section**

**Retired Members' Lunch**  
21 October  
ID=109263  
Park Farm Hotel, Hethersett  
Contact Janet Hubbard  
t 01603 742933  
e tshunbard@btinternet.com

 **ChemNet The Bigger Bang Show**

7 November at 13:00 and 19:00  
ID=108410  
Theatre Royal Norwich  
There will be two performances in this entertaining science show starring Hal Sosabowski and co-presenter the Doc, from ITV's Ministry of Mayhem  
Contact the Theatre Royal Norwich  
t 01603 630000

**Mid-Anglia Section**

**Science in the House of Commons**

13 October at 19:00  
ID=108475  
University of Cambridge  
• Dr Julian Huppert MP  
An excellent opportunity to come and meet the MP for Cambridge, and hear his views on the current state of science in the UK.  
In association with SCI CaGE Section  
Contact John O'Toole  
t 01223 894174  
e john.otoole9@btopenworld.com

**Biochemistry of Autumn – Why Do Leaves Fall in the Autumn?**

27 October at 19:00  
ID=107900  
University of Cambridge  
• Prof Brian Ford, President of the University of Cambridge Society for the Application of Research  
In association with SCI Cage Section and

Cambridge University  
ChemSoc  
**Contact John O'Toole**  
**t 01223 894174**  
**e john.otoole@**  
**btopenworld.com**

**The Science of Fireworks**  
**4 November at 19:00**  
**ID=108622**

University of Cambridge  
• Prof Chris Bishop, Vice President, Royal Institution of Great Britain  
All will be revealed through exciting, and sometimes explosive, demonstrations. In association with SCI CaGE Section and the University of Cambridge Department of Chemistry  
**t 01223 336300**  
**e openday@ch.cam.ac.uk**

**The Science of Fireworks!**  
**5 November at 16:00**  
**ID=108623**  
University of Cambridge  
See listing above

**Other Events**

**Industry and Technology Division**  
**Industry Hour**  
**4 October at 18:30**  
**ID=108924**  
Thomas Graham House, RSC Cambridge  
See entry in Scotland region

**Developing Expertise in Practical Chemistry – For Newly and Recently Qualified Chemistry Teachers**

**18 October**  
**ID=109005**  
Science Learning Centre East of England, Bayfordbury  
In association with Science Learning Centre East of England  
**Contact Kate Mouncey**  
**t 01992 503498**  
**e enquiries@eastengland.slcs.ac.uk**

**Analytical Division – East Anglia**  
**Molecular Spectroscopy Group**

**Recent Developments in Terahertz Spectroscopy and Imaging**  
**27 October at 10:00**  
**ID=108314**  
Thomas Graham House, RSC Cambridge  
In association with University of Cambridge  
**Contact Brian Woodget**  
**t 07899 910954 or 01438 880286**  
**e woodgetbrian@aol.co.uk**

**Analytical Division – East Anglia**

**Tablets and LIMS: A Powerful Combination for the Paperless Biopharmaceutical CMC Laboratory in the 21st Century**

**15 November at 10:00**  
**ID=108456**  
The Chemistry Centre, RSC London  
This seminar will look at the challenges associated with the implementation of a Wi-Fi enabled system in a GMP CMC laboratory environment with LIMS and Electronic Laboratory Notebooks (ELN).  
**Contact Brian Woodget**  
**t 07899 910954 or 01438 880286**  
**e bwoodget1@sky.com**

**NORTH EAST**

**Huddersfield Section**

**Section Social**  
**10 October at 19:30**  
**ID=108970**  
University of Huddersfield  
• Tom Owen, BNFL Sellafield  
Mixer meeting.  
Contact Wesley Moran  
**t 01484 473741**  
**e w.j.moran@hud.ac.uk**

**Asteroids, Comets & Meteorites – Nature's Chemical Factories**  
**19 October at 15:15**  
**ID=108972**

University of Huddersfield  
• Robert Williams, Huddersfield Astronomical & Philosophical Society  
Lecture on stellar chemistry.  
**Contact Steve Turner**  
**t 01484 422383**  
**e steve@turners7.freeserve.co.uk**

**Top of the Bench Regional Heat**  
**9 November at 13:40**  
**ID=109192**

University of Huddersfield  
**Contact Jeremy Hopwood**  
**t 01484 473989**  
**e j.d.hopwood@hud.ac.uk**

**Wild West Wines**  
**24 November at 19:00**  
**ID=109193**

University of Huddersfield  
• Prof John Hepworth, ex-University of Central Lancashire  
Illustrated tasting of US wines followed by a buffet.  
**Contact Steve Turner**  
**t 01484 422383**  
**e steve@turners7.freeserve.co.uk**

**Hull and East Yorkshire Section**

**Beverley Café Scientifique: Badly Behaved Proteins and the Search for a Cure for Alzheimer's Disease**  
**26 October at 19:30**  
**ID=108596**  
Costa Coffee, Beverley  
• Dr Jody Mason  
Café Scientifique is a place where, for the price of a cup of coffee, anyone can come to explore the latest ideas in science and technology.  
In association with the University of Hull  
**Contact Mark Lorch**  
**e science.cafe.beverley@gmail.com**

**Newcastle upon Tyne and North East Coast Section**

**Newcastle and Teesside Section Joint Mixer**  
**26 October at 18:00**  
**ID=109187**

University of Northumbria  
A chance to mingle with members from local sections in Newcastle and Teesside, over some refreshments.  
**Contact Remya Norris**  
**t 07753 276600**  
**e remya.norris@akzonobel.com**

**Southumbria Section**

**South American Wine Tasting**

**22 October at 19:00**  
**ID=107075**  
Singleton Birch, Barnetby  
• Mike Grubb, local wine tasting expert/lecturer  
**Contact Graham Horton**  
**e GH@singletonbirch.co.uk**

**Teesside Section**

**The Role of Science in the History of ICI**

**10 October at 17:00**  
**ID=109166**  
Wilton International, Redcar  
A two-part talk given by long-time employees of ICI Billingham.  
**Contact Jeff Franks**  
**t 01642 435784**  
**e jeff.franks@intertek.com**

**Durham University Chemical Society (DUCS) Lecture**

**25 October at 17:00**  
**ID=109167**  
Durham University  
A talk aimed at chemistry students, given by a representative from Proctor and Gamble.  
**Contact Alex Dudgeon**  
**e chemical.society@durham.ac.uk**

**Newcastle and Teesside Section Joint Mixer**

**26 October at 18:00**  
**ID=109187**  
University of Northumbria  
See listing under Newcastle upon Tyne and North East Coast section.

**Durham University Chemical Society (DUCS) Lecture**

**1 November at 17:00**  
**ID=109168**  
Durham University  
• Dr Peter Wothers, University of Cambridge  
A talk entitled 'Gods, Devils and Alcohol' aimed at chemistry students.  
**Contact Alex Dudgeon**  
**e chemical.society@durham.ac.uk**

**Other Events**

**Developing Expertise in Practical Chemistry – For Newly and Recently Qualified Chemistry Teachers**

**10 October**  
**ID=109002**  
Science Learning Centre North East, Durham  
In association with Science Learning Centre North East  
**Contact Nicola Hall**  
**t 0191 3706200**  
**e slc.northeast@durham.ac.uk**

**Developing Expertise in Practical Chemistry – For Newly and Recently Qualified Chemistry Teachers**

**20 October**  
**ID=109007**  
Science Learning Centre Yorkshire and the Humber, Sheffield  
In association with Science Learning Centre, Yorkshire and the Humber  
**Contact Susan Browett**  
**t 0114 2254891**  
**e enquiries@yorkshumber.slcs.ac.uk**

**NORTH WEST**

**Cumbria Section**

**Younger Member Network**

**Tour of Innovia Films**  
12 October at 19:00  
ID=108879

Innovia Films Ltd, Wigton  
• Dr Bob Paterson  
A tour of the cellulose film production facility at Innovia Films, followed by a talk on the 'Chemistry of Curry'.

**Contact Mark Gibson**  
t 07917 652278  
e mag7@sellafieldsites.com

**Younger Member Network**

**Chemistry of Scarce Earth Metals**  
13 October at 19:00  
ID=108880

Samuel Lindlow Building, Cumbria

• Dr Ian Fairlamb, York University  
Dr Fairlamb will explain the applications and associated benefits and issues of using scarce earth metals in modern day areas such as renewable energy, electronics, and catalysis.  
**Contact Mark Gibson**  
t 07917 652278  
e mag7@sellafieldsites.com

**Younger Member Network**

**Wine Tasting**  
11 November at 19:00  
ID=108881

The Chase Hotel, Whitehaven  
Gerard Richardson will once again host the popular wine tasting night.  
**Contact Mark Gibson**  
t 07917 652278  
e mag7@sellafieldsites.com

**The Rise and Fall of Marchon**  
23 November at 10:15  
ID=108882  
St Mary's Room, Gosforth

John Kennedy and Gordon Atkinson will discuss the history of the Marchon chemical plant.  
In association with West Lakes U3A Discovery Group

**Contact Graham Hutson**  
t 07515 187590  
e mag7@sellafieldsites.com

**Lancaster and District Section**

**From Laboratory to Commercial Success**

4 October at 19:30  
ID=108894

Preston College, Fulwood Campus

• Dr Stephen Coulson, Chief Technical Officer P2i, Abingdon, Oxfordshire  
**Contact Harry Clarke**  
t 01995 640003  
e hclarke906@btinternet.com

**Other Events**

**AstraZeneca EPR Spectroscopy in Pharmaceutical R&D**  
12 October at 09:00  
ID=108413

AstraZeneca, Macclesfield  
This is the first pharmaceutical industry based seminar to showcase Electron Paramagnetic Resonance (EPR) spectroscopy.  
**Contact Helen Williams**  
t 01625 518013  
e helen.williams@astrazeneca.com

**Developing Expertise in Practical Chemistry – for Newly and Recently Qualified Chemistry Teachers**

20 October  
ID=109006

Science Learning Centre North West, Manchester  
In association with Science Learning Centre North West  
**Contact Rachel Eppy**  
t 0161 2472944  
e slc.northwest@mmu.ac.uk

**Industry and Technology Division Speciality Chemicals Sector**

**Chemistry in the Oil Industry XII: Innovative Chemistry – Value, Risks and Rewards**  
7-9 November  
ID=108461

Manchester Conference Centre  
The symposium will look at the future of the application of chemistry and chemicals to extend the economic life of mature wells or to enhance the profitability of new fields. In association with the European Speciality Chemicals Association  
**Contact Ruth Lane**  
t 01928 788071  
e ruth@cowlane.co.uk

**Chemistry for Non-Specialists KS4**  
22-23 November  
ID=108997

Science Learning Centre North West, Manchester  
In association with Science Learning Centre North West  
**Contact Science Learning Centre North West**  
t 0161 247 2944  
e slc.northwest@mmu.ac.uk

**Industry and Technology Division**

**Industry Hour**  
29 November  
ID=108927  
Crowne Plaza, Manchester  
See listing under Scotland region

**SOUTH EAST**

**Chilterns and Middlesex Section**

**Lecture and Lunch for Retired Members**  
28 October at 11:30  
ID=108495  
The Chemistry Centre, RSC London  
• Mr Dai Morgan Evans, Society of Antiquaries of London  
Contact Stephen Robinson

t 02085 467940  
e stephenrobinson\_3@hotmail.com

**Thomas Graham Lecture**  
25 November at 17:00  
ID=109133

University College London  
• Prof David Phillips, RSC President  
Lecture entitled 'Prosperity through Chemistry'.  
**Contact Stephen Robinson**  
e stephenrobinson\_3@hotmail.com

**Downland Section**

**Top of the Bench**  
16 November-19 January  
ID=108785

At selected secondary schools in Downland  
The local section will again be running the Top of the Bench competition in the 2011-12 academic year.  
**Contact Chris Williamson**  
t 01372 451499  
e chris\_williamson@btopenworld.com

**Kent Section**

**Shepherd Neame Brewery Tour**  
12 October at 18:45  
ID=109165

Shepherd Neame Brewery, Faversham  
A guided tour behind the scenes at the busy Shepherd Neame Brewery.  
**Contact Sam Booth**  
t 01634 883187  
e S.E.Booth@gre.ac.uk

**Younger Member Network RSC Kent Local Section/ Universities at Medway Chemical Society Younger Members Mixer Meeting**

17 November at 18:30  
ID=108839  
University of Greenwich  
The evening will consist of a short talk followed by a buffet supper.  
In association with Universities at Medway

Chemical Society  
**Contact Rajitha Hanarasinghe**  
e hr91@gre.ac.uk

**Thames Valley Section**

**International Year Of Chemistry - Oxford Botanic Gardens**  
6 October-31 December  
ID=108964

Oxford Botanic Gardens  
Posters and exhibits linked to 'trails' in the Oxford Botanic Gardens illustrating such themes as photosynthesis and solar hydrogen production, chemical specialisation in plants, and more.  
[www.botanic-garden.ox.ac.uk](http://www.botanic-garden.ox.ac.uk)

**SOLD OUT: Tour of CCFE, Culham Centre for Fusion Energy**  
19 October at 18:15  
ID=108466  
Culham Centre for Fusion Energy, Abingdon  
**Contact David Knox**  
t 07890 546964  
e knoxy1986@hotmail.com

**Other Events**

**Industry and Technology Division Materials that Don't Cost the Earth**

3 October at 10:00  
ID=109060  
The Chemistry Centre, RSC London  
This free event examines the complex challenges and opportunities faced by industry in the energy and consumer product sectors that rely on scarce natural resources to manufacture their products.  
In association with Materials Security Special Interest Group  
**Contact Charlotte Beard, RSC**  
t 01223 432384  
e beardc@rsc.org

**Developing Expertise in Practical Chemistry – for Newly and Recently Qualified Chemistry Teachers**

4 October  
ID=109001

Science Learning Centre  
London  
In association with Science Learning Centre London  
Contact Helen Atkinson  
t 02076 126325  
e enquiries@london.slcs.ac.uk

**Bio-Organic Group, Protein and Peptide Science Group Frontiers in Chemical Biology**

10 October at 11:00  
ID=108952

The Chemistry Centre, RSC  
London  
This is a multidisciplinary meeting to bring together academics and industrialists with world-leading chemical biologists.  
Contact Ali Tavassoli  
e ali1@soton.ac.uk

**Management Group Innovation to Transform the Chemical Industry**

12 October at 9:30  
ID=109214

The Chemistry Centre, RSC  
London  
Leading industrialists will set out their insights of the future and views on how business needs to change. In association with SCI Science and Enterprise Group, CIA, BACS, CIKTN, IChemE and Ellen MacArthur Foundation.  
Contact SCI Conferences Department  
e conferences@sci.org

**Developing Expertise in Practical Chemistry – for Newly and Recently Qualified Chemistry Teachers.**

13 October  
ID=109004

Kent Science Resource Centre, Sittingbourne  
In association with Science

Learning Centre South East  
Contact Science Learning Centre South East  
t 023 80598810  
e enquiries@southeast.slcs.ac.uk

**The Chemistry Centre****What's in my stuff?**

13 October at 18:30  
ID=108738

The Chemistry Centre, RSC  
London  
• Dr Hywel Jones, Materials and Engineering Research Institute  
A science and art based approach to raising awareness of the use of the elements in consumer technology.

Contact Daisy Brittain,  
RSC

t 01223 420066  
e chemistrycentre@rsc.org

**Joint Pharmaceutical Analysis Group Modern Methods of Drugs Analysis in Biological Materials: Analysis of Drugs for the Olympic and Paralympic Games 2012**

13 October at 10:00  
ID=108541

Royal Pharmaceutical Society, London  
This event will cover recent developments in methods of drugs analysis in biological materials and their application to anti-doping control methods in the 2012 Olympic Games.  
Contact Gabriella Highfield  
t 02075 722640  
e events@rpharms.com

**Industrial Advisory Board Workshop**

19 October at 10:30  
ID=108726

The Chemistry Centre, RSC  
London  
The RSC Industrial Advisory Board Workshop will facilitate sharing of best practice between departments that have IABs and those wishing to establish them.

Contact Catherine Joce,  
RSC  
e HESTEM@rsc.org

**Automation and Analytical Management Group Monitoring the Aquatic Environment Using Sensor Technologies**

19 October at 09:00  
ID=109156

The Chemistry Centre, RSC  
London  
Contact  
R Narayanaswamy  
t 07974 515265  
e conference@aaamg-rsc.org

**The Chemistry Centre****Eating Sustainably: Dream or Reality?**

25 October at 12:30  
ID=108739

The Chemistry Centre, RSC  
London  
Scientist Carol Wagstaff, Reading University, explores if it is really possible to eat sustainably, or if it is simply an idealistic dream of a fairy-tale future?  
Contact Daisy Brittain,  
RSC  
t 01223 420066  
e chemistrycentre@rsc.org

**Analytical Division – South East Chemometrics Group Practical Chemometrics For The Analytical Scientist**

25 October at 10:00  
ID=108820

Sandown Park, Esher  
This symposium will introduce and explore some of the basic principles of the techniques and how they are being applied by analytical scientists.  
Contact Carl Hall  
t 02084 172482  
e c.hall@kingston.ac.uk

Environment, Sustainability and Energy Division  
Environmental Chemistry

**Group, Historical Group Environmental Chemistry: A Historical Perspective**

26 October at 11:00  
ID=108812

The Chemistry Centre, RSC  
London  
Who were the people who first raised concerns over man's impact on his environment? What are the key observations behind the debates on climate change? This joint symposium will answer these questions and much more.

Contact Rupert Purchase  
e rp@rupertpurchase.demon.co.uk

**RSC Conferences Imaging for Human Health**

27 October at 09:30  
ID=108921

The Chemistry Centre, RSC  
London  
This workshop will focus on research working across platforms including PET, NMR, Ultrasound and microscopy, pre-clinically and clinically.  
In association with Kings College Medical Engineering Centre  
Contact Ellen Friel, RSC  
e friele@rsc.org

**Applied Catalysis Group Challenges in Catalysis for Pharmaceuticals & Fine Chemicals III**

2 November at 11:00  
ID=108433

The Chemistry Centre, RSC  
London  
An exciting programme will highlight the current challenges and practices of catalytic science in the pharmaceutical and fine chemicals industries. In association with SCI Fine Chemicals Group  
Contact SCI Conference Department  
t 02075 98561  
e conferences@soci.org

CrystEngComm  
CrystEngComm Symposium:

**Pharmaceutical Polymorphism**

4 November at 09:30  
ID=109140

The Chemistry Centre, RSC  
London  
This symposium features a selection of lectures reflecting the academic and industrial breadth of the field of pharmaceutical polymorphism. In association with RSC journal *CrystEngComm*  
Contact Jamie Humphrey,  
RSC  
e humphreyj@rsc.org

**Protein and Peptide Science Group Protein and Peptide Science Group Early Stage Researcher Meeting**

8 November at 09:30  
ID=109029

The Chemistry Centre, RSC  
London  
• Prof Dek Woolfson, University of Bristol  
Contact Alethea Tabor  
t 02076 794695  
e a.b.tabor@ucl.ac.uk

**Analytical Division – East Anglia****Tablets and LIMS: A Powerful Combination for the Paperless Biopharmaceutical CMC Laboratory in the 21st Century**

15 November at 10:00  
ID=108456

The Chemistry Centre, RSC  
London  
See event under Eastern listings  
Contact Brian Woodget  
t 07899 910954 or 01438 880286  
e bwoodget1@sky.com

**Seminar**

17 November at 13:00  
ID=108679

University of Essex  
Using single molecules and ensemble techniques to investigate protein folding energy landscapes  
Contact Jody Mason  
e jmason@essex.ac.uk

**RSC Education  
School Teacher Fellows:  
A Valuable Resource**

**18 November at 10:00**

**ID=108757**

The Chemistry Centre, RSC  
London

A conference highlighting the benefits of School Teacher Fellows in HEIs, demonstrating the ways they can be used to develop and enhance outreach, to tackle transition issues and to improve teaching and learning.

**Contact Philip Robinson,  
RSC**

**t 01223 432428**

**e hestem@rsc.org**

**Marketing Group**

**The Challenges of Low  
Energy Lighting**

**21 November at 18:00**

**ID=107592**

The Chemistry Centre, RSC  
London

• Eddie Guest, GE Lighting  
Eddie Guest will talk about his experiences in the very topical subject of improving low energy lighting.

**Contact Mark Scudamore**

**t 01282 419080**

**e markscudamore@  
blueyonder.co.uk**

**Materials Chemical  
Division**

**ChemNet**

**Watts New with Clean  
Energy? Batteries  
Included**

**23 November at 18:30**

**ID=108509**

The Chemistry Centre, RSC  
London

• Prof Saiful Islam,  
University of Bath  
With the aid of 3D specs for all, Prof Islam will highlight the fascinating science of crystalline materials for lithium batteries and fuel cells on the atomic scale.

**Contact Deirdre Black,  
RSC**

**t 01223 432254**

**e events@rsc.org**

**Chemical Information  
and Computer  
Applications Group  
(CICAG)**

**The Future Information  
Needs of Pharmaceutical  
and Medicinal Chemistry**

**28 November at 10:00**

**ID=109226**

The Linnean Society,  
Burlington House, London  
Discussions on how the scientist and information professional of the future will utilize pharmaceutical and medicinal chemistry information.

**Contact Diana Leitch**

**t 0161 445 9461**

**e diana.leitch@  
googlemail.com**

**SOUTH WEST**

**Mid-Southern Counties  
Section**

**Top of The Bench**

**6 October at 10:00**

**ID=108973**

Portsmouth Grammar  
School

Elimination competition to find the Section's representative school for the RSC national Top of the Bench finals. Year 9-11.

**Contact Mark Howson**

**t 023 92 360036**

**e m.howson@pgs.org.uk**

**Retired Members' Lunch**

**17 October at 12:30**

**ID=108975**

Emsworth Sailing Club,  
Portsmouth

A luncheon for retired section members to meet new members and keep in touch with colleagues. Prior application required.

**Contact Walford Davies**

**t 01243 372241**

**e walford.davies@  
ntlworld.com**

**The Contemporary  
Chemistry Club**

**1 November at 17:30**

**ID=108978**

Science Learning Centre,  
Southampton

A 'hands-on' chemistry education evening for teachers.

In association with Science  
Learning Centre

Contact Ian Galloway

**t 02380 598810**

**e I.Galloway@soton.  
ac.uk**

**Visit to JET, Joint  
European Torus, Fusion  
Device**

**16 November at 18:15**

**ID=108979**

EFDA Jet, Oxfordshire  
An opportunity for members of the local section to enjoy a guided tour.

**Contact Phil Warwick**

**t 02380 596600**

**e phil.warwick@noc.  
soton.ac.uk**

**Other  
Events**

**Industry and Technology  
Division**

**Industry Hour**

**11 October at 18:30**

**ID=108925**

Holiday Inn, City Centre,  
Bristol

**See listing under  
Scotland region**

**Developing Expertise in  
Practical Chemistry –  
for Newly and Recently  
Qualified Chemistry  
Teachers**

**18 October**

**ID=109027**

Science Learning Centre  
South West, Bristol

In association with Science  
Learning Centre South  
West

**Contact Joanne**

**Dickerson**

**t 0117 915 7257**

**e info@slcsw.org.uk**

**Chemistry for Non-  
Specialists KS3/4**

**20-21 October**

**ID=108996**

Plymouth High School for  
Girls

In association with Science  
Learning Centre South  
West

**Contact Science Learning**

**Centre South West**

**t 0117 915 7257**

**e info@slcsw.org.uk**

**Formulation Science  
and Technology  
Group**

**Secrets of  
Formulation III**

**16 November at 09:30**

**ID=108775**

SCI HQ, London

This meeting is suitable for all those interested in the design and application of colloidal systems including both academia and industry. In association with SCI

**Contact Helen Dutton**

**e secretary@**

**formulation.org.uk**

**INTERNATIONAL**

**BELGIUM**

**Visit to Institute for  
Reference Materials and  
Measurements (IRMM)**

**14 October at 14:00**

**ID=109174**

IRMM, Geel, Belgium

The IRMM is the European Commission's Joint Research Centre responsible for the storage, distribution and development of reference materials for emerging measurement needs in fields including clinical chemistry, GMO's, microbiology and for food contaminants.

**Contact Ian Carson**

**t 0032 497 69 18 83**

**e rscbelgium@gmail.  
com**

**Ceremony  
Commemorating  
the Work of August  
Kekulé**

**28 October at 16:00**

**ID=109175**

University of Ghent,  
Belgium

IYC 2011 is also the 150th anniversary of Kekulé's publication of his original textbook on organic chemistry.

In association with  
University of Ghent

**Contact Ian Carson**

**t 0032 497 69 18 83**

**e rscbelgium@gmail.com**

**GHANA**

**RSC International  
Pan Africa Chemistry  
Network**

**PACN Congress 2011 on  
Agricultural Productivity**

**21-23 November**

**ID=108322**

Accra International  
Convention Centre, Ghana  
This PACN Congress will bring leading scientists together to discuss current research and ideas in the agricultural sciences.

**Contact RSC Events**

**e events@rsc.org**

**t 01223 432254**

**SOUTH AFRICA**

**Faraday Division  
Pan Africa Chemistry  
Network**

**Pan Africa Chemistry  
Network Catalysis  
Workshop**

**16-19 November**

**ID=108865**

School of Chemistry,  
Johannesburg  
A residential workshop on Catalysis for Sustainable Chemistry for African scientists and engineers. In association with the South African Chemical Institute

**Contact Colleen Coutts**

**t 0027 (11) 717 6749**

**e colleen.coutts@wits.  
ac.za**

**USA**

**Joint Pharmaceutical  
Analysis Group  
Symposium on  
Spectroscopy  
and Imaging in  
Pharmaceutical  
Analysis**

**5 October at 10:30**

**ID=109147**

Grand Sierra Resort,  
Nevada, USA

The latest advances in spectroscopy and imaging for use in the pharmaceutical industry will be presented.

**Contact FACSS**

**e facss@facss.org**

## Notices

### CChem accreditation for training courses

The RSC has recently accredited training courses at biopharma company UCB, as well as BP Refining and Marketing, and the nucleargraduates scheme administered by the Nuclear Decommissioning Authority.

RSC accreditation demonstrates that company training compares well against good practice elsewhere. It also shows that the training schemes recognise and develop the professional attributes required for the award of Chartered Chemist (CChem) status.

Each accredited company is reviewed by the RSC's Admissions Committee and means that employees can participate in professional development whilst working towards a widely recognised professional qualification. Employees taking part in these training schemes can achieve CChem status after four years rather than the five normally required by the RSC's application procedure.

For more information about accreditation of company training, contact Sarah Harrison, RSC Professional Standards Specialist. [harrisons@rsc.org](mailto:harrisons@rsc.org)

### IUPAC-Richter Prize

The International Union of Pure and Applied Chemistry (IUPAC) is inviting nominations for the 2012 IUPAC-Richter Prize. This accolade is awarded to an internationally recognised scientist – usually a medicinal chemist – whose activities or published accounts have made an outstanding contribution to the practice of medicinal chemistry or to an outstanding example of new drug discovery.

The closing date for nominations is 31 December 2011. For further information, contact Robin Ganellin, University College London. [c.r.ganellin@ucl.ac.uk](mailto:c.r.ganellin@ucl.ac.uk)

### British Vacuum Council prizes

Nominations are now being accepted for two prizes awarded by the British Vacuum Council (BVC). These recognise distinguished contributions to scientific research in the fields of vacuum science, surface science, thin films or related topics. Full details and online nomination forms are available on the BVC website. [www.british-vacuum-council.org.uk](http://www.british-vacuum-council.org.uk)

## Deaths

#### Mr Brian Frederick Bailey MRSC

Retired senior assistant scientist, Severn Trent Plc. Died 30 June 2011, aged 70

#### Mr David John Davies CChem FRSC

Retired.  
Date of death not supplied

**Dr Marian Elizabeth Davies MRSC** Retired lecturer, Royal School of Veterinary Studies, Edinburgh.  
Died 29 July 2011, aged 90

#### Mr William George Nelson Golby CChem

**MRSC** Retired plant manager, BNFL.  
Died 26 July 2011, aged 88

#### Dr Paul Fernall Griffey CChem FRSC

Retired.  
Died 21 July 2011, aged 83

**Mr Donald Hacker CChem MRSC** Formerly consultant. Died 5 March 2011, aged 77

**Dr Orestis Koumides CChem FRSC** Retired consultant. Died 21 May 2011, aged 90

**Mr Alfred Edgar Rout CChem FRSC** Retired consultant, oil and gas.  
Died 27 July 2011, aged 93

**Miss Shuk Fan Tai MRSC** Formerly laboratory technical assistant, Unilever Research. Date of death not supplied

**Professor John Pentony Teegan CChem FRSC** Retired professor of spectroscopy, University College Cork. Died 25 June 2011, aged 87

**Dr Antony Bruce Trenwith MRSC** Retired.  
Died 26 July 2011, aged 87

## Personal News



### Half a century of chemistry

Five former students of the very first chemistry sandwich course at the Medway College of Technology recently celebrated 50 years since their graduation with a reunion dinner in Sussex.

They finished the chemistry course in 1961, gaining admission as Graduate Members of the then Royal Institute of Chemistry (RIC) by examination.

The Sandwich Course had been developed as the result of the White Paper on Technical Education in 1956, which followed a speech by Winston Churchill in the previous year. One of the graduates, Michael Pinnegar commented: "One of its main recommendations was that Britain needed to educate more scientists and technologists to ensure economic prosperity in post-war Europe and the world. How true that remains today!"

Following the white paper, the RIC, together with industry and the Ministry of Education developed a tripartite initiative to sponsor a Sandwich Course, allowing students to gain practical experience with organisations including British Petroleum, Bowaters and the Gas Board.

Pictured from left to right are 1961 graduates Ian Hills, Michael Pinnegar, Richard Mills, William Wilson and Michael Cresswell, together with their wives.

### Free advertising for student placements

If your organisation is offering industrial placements and internships, they can be advertised for free on the RSC's jobs site, ChemistryWorldJobs. These placement and internship listings are being funded by the National HE Stem Programme.

Industrial Placements are usually 12 months long and carried out as part of an undergraduate degree course, providing students with practical experience of the workplace. Recruitment takes place annually in autumn for the following academic year.

For further details on getting started with hosting students, or to advertise current placements, contact the RSC.

[HESTEM@rsc.org](mailto:HESTEM@rsc.org)

[www.rsc.org/iplacements](http://www.rsc.org/iplacements)

# Click through to a great career

**@ ChemCareers 2011**

THE CAREERS FAIR WITH A DIFFERENCE



**31 October – 4 November 2011**

Hosted on MyRSC, the online professional network for the chemical sciences

ChemCareers is the careers fair with a difference. An online event, featuring employees from over 30 top firms, ChemCareers will allow you to:

- **Discover** the huge range of career opportunities available to chemical scientists
- **Learn** how to market yourself to employers in job applications and interviews
- **Seek** expert advice on career planning and making your next career move
- **Investigate** further study options
- **Network** globally with both employers and other chemical scientists

Register now at <http://my.rsc.org/chemcareers> and sign up to the 'ChemCareers' group to be kept up-to-date with the programme of events.