

## welcome to issue 31

### Get Ready To Meet the Universities

Plans are well underway for the annual *ChemNet* Meet the Universities (MTU) event, held in London on 4th July at the Royal Horticultural Halls.

### What is MTU?

We've gathered together in one place representatives from nearly half of the UK universities that offer chemistry degree courses. This offers you the chance to talk to them and narrow down your choices ahead of your UCAS application.

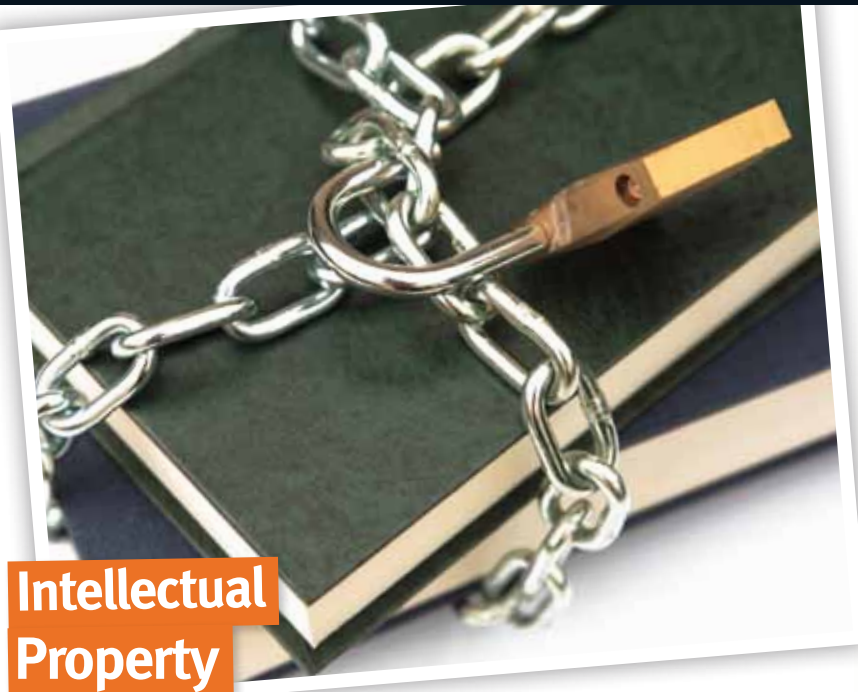
### Why should I go to MTU?

It's a great opportunity to meet admissions tutors, students, lecturers and other representatives from university chemistry departments to find out more about their courses and what it's like to study there. A full list of universities exhibiting can be found on the MTU website. To see this list and book your place online visit: [www.rsc.org/mtu](http://www.rsc.org/mtu)

The event is FREE for *ChemNet* members, parents and teachers. It's informal with lots of sofas, coffee tables, chit-chat, seminars and freebies! Don't miss it!

*R. Bowles*

Robert Bowles – Editor



## Intellectual Property



Vitally important in all industries, intellectual property is the sum total of companies research and development. It represents the real wealth of a company so it is protected through patents and trademarks. As a result of this there are some great career opportunities for chemists in this area. They can get to make use of their specialist knowledge in the legal and commercial worlds as patent attorneys, solicitors or barristers. The work is varied, so one day you could be discussing the intricacies of a chemical synthesis and the next arguing

## Website of the month

Going to Meet the Universities in July can help you to plan your UCAS application but you'll need to plan your finances too. Going to university is a big financial commitment but well worth it as it can increase your earning potential over the course of your career. This site has everything you need to

about the branding of an international drinks company. More info about the area and careers in intellectual property can be found here:

<http://www.ipso.gov.uk>

<http://www.epo.org/>

<http://www.cipa.org.uk/pages/about-careers>



know about sources of funding and how to apply for it.

[www.direct.gov.uk/studentfinance](http://www.direct.gov.uk/studentfinance)

## chemnet events

Many *ChemNet* events have now been confirmed. Go to [www.rsc.org/chemnet](http://www.rsc.org/chemnet) click on *ChemNet* events and follow the links to events.

### *ChemNet at Reading Scientific Services*

Behind the scenes at this world leading supplier of analytical services for the food, pharmaceutical and consumer goods industries.

21 April 2009

### *ChemNet at the Bank of England Off Threadneedle Street, London*

Learn more about the applications of chemistry in producing banknotes and how to thwart counterfeiters using nanotechnology.

7 May 2009

### *ChemNet at Sheffield Assay Office*

Learn more about the analysis and hallmarking of precious metals from the people who have been doing it for over 200 years.

1 July 2009

More information can be found on the *ChemNet* events pages at [www.rsc.org/chemnet](http://www.rsc.org/chemnet). To book your place on any of the events, except MTU, email us at: [chemnetevents@rsc.org](mailto:chemnetevents@rsc.org) with your name, membership number, the name and date of the event and how many places you need. Remember all events are free to *ChemNet* members and their teachers.

## chemistry on the web

Chemistry videos from the Institute of Chemical Engineers [www.whynotchemeng.com/uk-and-ireland/teachers/top-ten-flash-bang-demos](http://www.whynotchemeng.com/uk-and-ireland/teachers/top-ten-flash-bang-demos)

A well-designed gateway to different chemistry topics and other websites related to them.

<http://www.chemistryguide.org/index.php>



There's more great online chemistry content here. Some of it is aimed at first year undergraduates but worth a look and gives a sneak peak of first year chemistry degree content.

<http://www.wiredchemist.com/index.html>

Eric Weisstein's chemistry encyclopaedia. This site is handy when doing for extended investigations and other assignments and includes a biography of chemists from the past.

<http://scienceworld.wolfram.com/chemistry/>

A one-hour long radio show featuring chemistry and the periodic table has been posted at the UCLA chemistry department website.

[www.chem.ucla.edu](http://www.chem.ucla.edu)  
Look for the icon representing H near the top left hand corner of news items.

If you want to register to use the discussion board email [chemnet@rsc.org](mailto:chemnet@rsc.org)

## Chemistry in the news



### Research and development

Back in February the Science Minister, Lord Drayson, was asking the question: should science only be funded if it makes money? This is a particularly pertinent question in these economically troubled times when there's £1.5bn research funding to be spread across UK universities. Is the debate as clear cut as that? Can you really separate science research which directly makes money from that which doesn't... so called "blue-sky" research?

Research and development are often discussed together because there is a lot of overlap between them. Research is about pushing back the boundaries of what is known and increasing the sum total of human knowledge, often in a university environment, whereas development is all about taking that knowledge and using it to develop new applications, often in a commercial setting. The developmental process can often lead to new areas of research being commissioned: e.g. new techniques to overcome a particular developmental problem which can then be used in many different ways, whilst blue skies research can often be commercialised quickly. Clearly there is a real opportunity to fund chemistry research irrespective of

knowing where it will lead, because in the end there is always the possibility of economic benefit arising from the research.

Britain has a fine reputation for chemistry research but historically hasn't always managed to capitalise on it. The situation is changing though, with the effects of legislation passed in the 1980's starting to be felt. These laws now let universities keep ownership of the Intellectual Property from their research and benefit from it directly, whereas in the past they had to hand it over to central government. For example, since 1988 the Oxford Chemistry Department has earned over £80million for the university, created six public companies and a further fifteen that are still private. This commercial activity is now being replicated in many UK chemistry departments and more researchers are now aware of the potential economic potential of their research. Looking ahead, countries that don't spend public money to innovate and develop new products won't be able to compete with those that do. Those countries always take steps to secure their discoveries through patents and copyrights – see the front page for more information on this area.

“To book a place on a ChemNet event email: [chemnetevents@rsc.org](mailto:chemnetevents@rsc.org) or call 01223 432340”

### HAVE YOUR SAY!

Would you like to see your article in the next issue? If it's good enough we'll print it! Submit your article to [chemnet@rsc.org](mailto:chemnet@rsc.org)

### CHEMISTRY FACTS

In 2006, the world's four largest spenders of Research and Development were the United States (US\$343 billion), the EU (US\$231 billion), Japan (US\$130 billion), and China (US\$115 billion).

## free stuff!



Last month's winner of the £20 HMV voucher was Tom Edlin from Huntingdon. Well done Tom! He correctly answered that the Mars Rover Spirit touched down on Mars on 4th January 2004.

This month we again have prizes of a £20 HMV gift voucher and a MolyMod kit up for grabs! Text us on **07825 186304** Text us on the answer to this question:

*At which UK University was cephalosporin C, the vital precursor from which cephalosporin antibiotics are produced, first isolated?*

You can also send your answers by email to: [chemnet@rsc.org](mailto:chemnet@rsc.org). The closing date is 9th April.

