

## welcome to issue 26

Following on from last month's inclusion of *Chemical Science*, this month we've got a copy of *Chemical Biology*, another monthly digest of research from RSC Publishing. We've also got the latest information on the 2008 Nobel Prize in Chemistry for you – the fascinating story of how jellyfish proteins have helped the study of the chemistry of life at work within individual cells.

As with so many other technologies which have helped us to see things which were once invisible, such as the microscope or mono-clonal antibodies, GFP has produced a real leap forward in our knowledge of cellular systems.

I hope your UCAS application is progressing well and that you're applying for chemistry. We have some information this month first hand from a current chemistry student which may help you prepare for the next step – the university open day or UCAS day. (See *Open Days and UCAS Days* article to the right).

*R. Bowles*

Robert Bowles – Editor



## Open Days and UCAS Days

### CAREERS SPOT

**Catherine Lawrence, a chemistry student at Nottingham, shares her experiences of applying for university...**

After you've sent off your UCAS form, you may get an offer straight away, but it's more common to be asked for interview. This involves attending a UCAS day. You'll get a tour of the department and other areas of the site. This is a good time to ask the staff questions and also current students at the university who can give you information that won't be in the prospectuses! Interviews are normally held after lunch when everyone is a little less nervous, although they can still seem nerve wracking.

## Website of the month

### INFOCHEM – HAVE YOUR SAY

In September 2006 *Infochem* was redesigned and relaunched as an eight-page magazine. The editor needs your opinion on the content – are the stories interesting? are they written at the right level? what do you like best? is there any subject that you would like to be covered in future issues?

*InfoChem* have set up an online readership survey for you to complete at: <http://www.infochemsurvey.org> Please take a few moments to complete the survey.

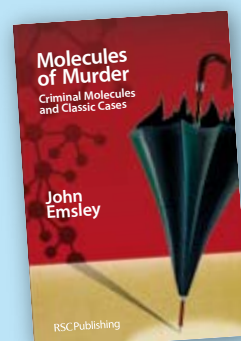
As a thank you we are giving a **£50 HMV token** to the person whose name is drawn from the entries on 8 December.

## chemnet events

*Molecules of Murder*  
talk

**Catalyst Science  
Discovery Centre  
Widnes**

11 November



*What chemistry has  
done for me*  
careers event  
**Surrey University**  
18th November

**Coming soon:**  
*ChemNet* event at the  
**National Space Centre  
Leicester**

Let us know if you want more details about any of the above events or want to book your place:

Email us at [chemnet\\_events@rsc.org](mailto:chemnet_events@rsc.org)

If you live near any of these areas you'll get an invite in the post. Look out for them, they fill up fast.

TEXT US  
ON 07825  
186 304

## chemistry on the web

More information about previous winners of the Nobel prize for chemistry can be found here: [http://www.nobelprize.org/nobel\\_prizes/chemistry/](http://www.nobelprize.org/nobel_prizes/chemistry/)

While we're on the theme of prizes for chemistry research, make sure you check out the IgNobel prizes, awards for science, including chemistry, which will make you laugh! I promise you, once you've seen this year's winners for chemistry you'll never look at a can of Cola in quite the same way again! Previous winners can be found here: <http://www.improbable.com/ig/winners/>

There is more information about biofuel cell research and other related technologies on this research website – relating to a project funded through the EU. <http://www.healthyaims.org/>

## Chemistry in the news



This year's Nobel Prize for chemistry goes to a group who discovered and developed the uses of green fluorescent proteins (GFP). One of the winners, Roger Tsien, is on the editorial board for the RSC's *Integrative Biology* journal. More information is provided about the chemistry and the uses of this discovery in the enclosed booklet. One of the things I like most about science in general and chemistry in particular is how someone has an idea or does some research and learns something, and then others take that idea or knowledge and look at how to use it in new and interesting ways.

This Nobel Prize is a prime example of this aspect of the scientific process. I'm sure that when GFP was discovered, its applications in understanding cellular biochemistry couldn't have been foreseen.

### Using sugar chemistry to make sweet, sweet music.

The next step of the scientific process is to take those new applications and refine

(pun intended!) them further into a useful form. This is the theme for this story about using sugar to power your MP3 <http://www.tinyurl.com/4nkzs8> The biofuel cell produces enough energy to run an MP3 player and speakers, although for how long depends on your taste in music – rock lovers might find it failing quicker than those who like their music quieter and more refined (sorry, there's that pun again!) Previously the energy output from biofuel cells has been too low for practical applications, so this represents a real breakthrough.

More and more research is now looking at the applications of science but are we missing a trick? If there's a reduction in the basic research being carried out to further the boundaries of knowledge we'll miss opportunities we hadn't considered. Elucidating the structure of DNA was done with no concept of the final uses that this discovery would have now – let alone what's to come in the future.

## free stuff!



The two winners of the *Molecules of Murder* books last month were David Hui from Bristol and Amy Ruddleston from Huntingdon who correctly identified the diameter of the large hadron collider as 8.6 km. They will be receiving their books soon. September's winners were Rebecca Morgan from Fakenham, Caroline Whalan from Crowborough and Parisse Moore from Brighton.

Back to Molymod kits this month. We have just one to give away this month. To win a Molymod Chemistry molecular modelling kit this month email the answer to this question: *What is the latin name of the jellyfish species from which GFP was first isolated?* Send your replies by 15 November to [chemnet@rsc.org](mailto:chemnet@rsc.org) or call 01223 432340.

“To book a place on a ChemNet event email: [chemnet@rsc.org](mailto:chemnet@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

The phenomenon of liquid crystalinity was first discovered by Friedrich Reinitzer in 1888. He was an Austrian Botanist who was trying to measure the melting point of a compound he had just made called cholesteryl benzoate. He found that this compound had two melting points. At 145.5°C the crystals formed a cloudy liquid and at 178.5°C the liquid became clear. The humble start of a billion dollar industry.

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

