



ChemNet News

Issue 5 - February 2007

Welcome to Issue 5

Hope those of you who had chemistry exams in January did OK. Got any exam horror stories you want to share with your fellow ChemNet members? We'll be glad to offer a cybershoulder to cry on. Email us at chemnet@rsc.org, or post on the ChemNet discussion board. Maybe you did much better than you expected, we'd like to hear about that too!

ChemNet Events

Well, we held our first ChemNet event at Birmingham University in December. The presentation from Prof Tuckett is now on the ChemNet website. If you have any questions about it please feel free to email me and I'll pass them on to Prof. Tuckett.

January has been a bit hectic as schools have come back off their holidays and many university terms had not started before ChemNet News was sent to the printers. However, I can confirm that we are having a ChemNet event here at the RSC in Cambridge in March. ChemNet members are also invited to careers events I'll be attending in Amersham, Reading and Newton Abbott. Details of these events will be sent to members in these areas very soon. RSC local sections also run a number of events for schools, we'll have a list of them on the ChemNet website shortly. We should soon be able to confirm an event at St Andrews University in Scotland towards the end of March too. For further information on these events e-mail: chemnet@rsc.org. This is just the beginning of a very busy calendar of events so remember to check out our website www.rsc.org/chemnet to keep in touch with all ChemNet activities.

Careers Spot

Chemical engineer - fancy being a modern Alchemist?

Chemical engineering or process engineering isn't about turning base metals into gold, but it is about turning raw materials into useful materials and products e.g. crude oil into plastics, synthetic fibres and petrol. Our modern society relies on the work of Chemical Engineers – they help manage resources, protect the environment and control health and safety procedures, while developing the processes that make the products we desire or depend on. Biochemical engineers are a more recent development and produce new products from biological sources. Chemical engineers are involved in solving many of the Earth's problems to secure our future. They are working on new fuel technologies, designing and making new drugs to combat disease and involved in the clean-up of pollution

How much can I earn? Chemical engineers are paid really well, coming third on a list of Graduate Earnings published in The Times in 2005, behind only doctors and dentists. The average starting salary for a Chemical Engineering graduate is £24,000, not bad eh?

More information about being a chemical engineer can be found at the institute of Chemical Engineers Website: www.whynotchemeng.com

Chemistry on the Web

Here are a couple of really helpful web pages, packed full of useful reference data for when you need to look up elements or chemicals during assignments.

The Periodic Table of Data is interactive, showing data in a number of different customisable tables and graphs, as well as unique Energy Levels diagrams for all the elements. It is a great way to look for relationships between groups of elements.

<http://www.chemsoc.org/networks/learnnet/ptdata/welcome.htm>

Another cool site is: www.webelements.com they also have a periodic table, as well as lots of other up-to-date chemistry information, including blogs. They even have WapElements™: get the elements on your Wap phone. How cool is that??!!?

Chemistry in the News

This caught my eye on the BBC news website.

<http://news.bbc.co.uk/1/hi/education/6266697.stm>

The University of Cambridge is creating a new professorship, the Winton Professor of the Public Understanding of Risk. This is kind of interesting, have we as a society lost the ability to make decisions for ourselves based on risk? Clearly individuals haven't, we do a risk assessment every time we cross the road, bungee jump or get out of bed..... but these are often carried out in the blink of an eye by our subconscious. Is there now simply so much information that we have lost track of what's safe and what's not? Or do we just need some extra help to allow us to come to our own decisions about what is safe and what isn't? Risk is analysed using mathematics, comparing the likelihood of something happening against the severity of the consequences of the event, but the data about those consequences, e.g. determining the level of toxicity of chemicals in the body and the environment, is generated by chemists - see you knew I was going to get to the chemistry soon didn't you?

The EU reached an agreement on REACH just before Christmas. REACH stands for Registration, Evaluation and Authorisation of Chemicals, and this is a whole raft of regulations brought in by the EU to regulate the production, sale and use of chemicals. It puts the emphasis on industry to show that the chemicals it uses are safe, even if they have been used for years, and to encourage industry to seek safer alternatives for hazardous chemicals where possible. These are aimed at reducing the risk of the presence of chemicals in the environment. This is going to be creating a lot of work and career opportunities for chemists in the future.

More info about REACH can be found here:

<http://news.bbc.co.uk/1/hi/world/europe/4437304.stm>

And finally...

The competition winner from last month will be posted on the discussion board as usual. I have not put a competition in this month's newsletter, but I might post one on the discussion board if the urge takes me, keep an eye out. What's that? You haven't registered for the discussion board yet? Well, why not? Remember email me at chemnet@rsc.org with your preferred username (trust me we've had some strange ones) and we'll get you sorted. This month we've had postings on Polonium, project ideas for Salters Advanced chemistry investigations, and lots of other good stuff. Come and join us and get involved.

R. Bowler.

