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Calendar of Events

Work Experience Week
Date: 1-5 September

Celebrating 50 years of Chemistry at York
Date: 5-7 September

Chemistry at Work
Date: 16—18 September
Time: 3pm
Location: A & B Blocks

Open Days
Date: Sat 20 & Mon 22 Sep

Macmillan Coffee Morning
Date: Thursday 25 / Friday 26 September
Time: 10am—12pm
Location: Biology Atrium / D Block Coffee Room

Innovative Doctoral Training in Chemistry Launch Event
Date: Wednesday 1 October
Time: 4pm—6pm
Location: DS/008

KMS Prize Winners' Seminar and Poster Session
Date: Wednesday 8 October
Time: 2.30pm
Location: A101

Date of Next Issue: 26th September 2014
Scientists from the Green Chemistry Centre of Excellence (GCCE) at the University of York are to work with colleagues in Cape Town to help the recovery of valuable metals from mine wastes in South Africa. They have won a 7th Framework Programme “Twinning” grant from the European-South African Science and Technology Advancement Programme (ESASTAP) as part of a drive to deepen scientific and technological cooperation between Europe and South Africa. ESASTAP is seeking to establish strategic, long-term institutional cooperation between EU and South African partners.

The York team -- Professor James Clark, Dr Andrew Hunt and Dr Helen Parker -- will twin with scientists from the University of Cape Town (UCT) to combine their expertise in green technologies for the recovery of platinum group metals (PGMs) from mine wastes.

This will harness current research being carried out at the GCCE as part of Phytocat, a €1.2 million project funded by the G8 Research Councils Initiative on Multilateral Research Funding: Material Efficiency, www.phytocat.org. Phytocat investigates the recovery of PGM’s using plants.

Professor Clark says: “Our objective will be to combine this with novel bioadsorption technology, developed at UCT, to recover metals from both liquid and solid mine wastes. South Africa is the leading miner and supplier of PGMs to the world market and is the ideal location for this project.”

In addition to this work, the GCCE will also help to establish a Centre of Excellence in Green Chemistry at UCT with the expectation that this will facilitate further project collaborations and an enduring alliance between York and UCT.

Dr Paul Clarke was interviewed by Chemistry World Magazine for a feature article of the Total Synthesis of Natural Products. The article will be in the September issue of Chemistry World and the associated podcast will be available for download from September from the Chemistry World website.
Medal for Sir John Holman

Professor Sir John Holman has been awarded the 2014 Kavli Education Medal by the Royal Society of his ‘significant impact on science education within the UK’. He is among 19 recipients of the Royal Society’s 2014 awards, medals and prize lectures in recognition of their achievements in a wide variety of fields of research.

Sir John said: “It is a great honour to receive this prize from the world's premier scientific society. I have also been privileged to be part of the Royal Society’s Vision programme, setting out a blueprint for science and mathematics education for the coming years.”

Earlier this year, he was the Royal Society of Chemistry Lord Lewis Prize winner for 2014, which recognised his extensive influence over chemistry education policy. As well as being an Emeritus Professor in Chemistry at York, Sir John is adviser in Education at the Wellcome Trust and the Gatsby Foundation.

He was the founding Director of the National Science Learning Centre from 2004 until September 2010, and adviser to the English government as National Science, Technology, Engineering and Mathematics (STEM) Director from 2006 until September 2010. He has taught learners of chemistry and science at all levels from 11 year olds to undergraduates and currently teaches chemistry to undergraduates at York.

The full list of Royal Society Awards, Medals and Prize Lectures is here:

https://royalsociety.org/awards/medallists/2014/

Terry Dillon News

In July, Dr Terry Dillon and Dr Andrew Rickard attended the 23rd International Symposium on Gas Kinetics in Szeged, Hungary. Dr Terry Dillon gave the Atmospheric Chemistry plenary lecture on "Radical recycling chemistry in clean air". The exciting news is that Terry and Andrew will be acting as local organisers for the next meeting in York in 2016!
CIEC Promoting Science at Billingham South Primary School

Year 5 from Billingham South Primary School would ALL like to become scientists after working with CIEC Promoting Science Advisory Teacher Jenny Harvey!

Jenny Harvey was delighted with the enthusiasm of the children at Billingham South Primary. After delivering the school sessions using the Water for Industry resource the class visited the local Johnson Matthey plant.

They met several scientists who demonstrated different scientific concepts that the children could relate to the work they had done in school. The thank you letter the class wrote to JM explains what they saw...

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Dear Scientists,

We are writing this letter to say that Year 5 had a wonderful time visiting Johnson Matthey Industrial Site. We all enjoyed watching the PowerPoint at the beginning, in the hall and the little experiment with the catalyst and fairy liquid.

All the staff in Johnson Matthey and the group leaders were fabulous. We all liked the mad scientist Steven, especially when he showed us how to make a catalyst liquid, even though it didn’t work we still enjoyed watching him. Year 5 also liked it when Kathryn showed us how she makes the catalysts but demonstrated using play doh.

After that we went to another building and we met Peter. He showed us the experiment using a catalyst, a balloon and diet coke. It was great!

Next we went to see Mr Phillips and he showed us some liquid Nitrogen. Liquid Nitrogen is so cold that it can freeze just anything! Mr Phillips then showed us how the Nitrogen can freeze an orange. We had a class vote and this was our favourite activity because he poured the liquid Nitrogen on the floor.

We would all like to thank you for the gift bags which you gave us at the end of the trip.

We would love to come and visit you all again!

Yours sincerely,

Year 5K
A heat exchanger under construction

Peter of Johnson Matthey using diet coke in his demonstration

### Board of Studies Calendar of Meetings 2014-2015

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<th>Term</th>
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* Provisional dates for Extraordinary meetings for Examinations results

**Graduation Ceremony Dates:**

Spring 23 and 24 January 2015,
Summer 15, 16, 17 and 18 July 2015
Department of Chemistry Performance Review 2013

We reported to the Centre in February 2014, that during the Performance Review Cycle of 2013, 100% of all Chemistry staff were reviewed. Thank you to everyone for engaging in the process.

Actions that have been taken as a consequence of the performance review process in 2013 include:

- New space for chemical biology has been provided within B Block and YSBL medium term space issues have been addressed (within Biology). Further flexible teaching space is being developed along with additional study space for undergraduates.

- The Computing facilities in the Department have been enhanced by provision of 24 new spaces in F Block (and the new appointment in the electronics workshop has some responsibility for technical IT support).

- Workload model is being extended to include research contributions for academic staff.

- Changes to assessment are being considered by working group to reduce workload on academic and teaching staff.

- Session on stress to be held at academic staff forum in September 2014.

- Need for additional support in Administration Team identified and progressed.

- Regular meetings for Workshop Staff now held and additional support for electronics workshop staff identified and a new post advertised.

- Additional technical support for E block progressed.

- Improvements to external website and intranet have been implemented.

- Health and Safety Issues raised have been reviewed and discussed by Personnel Advisory Group, the Safety Management Group and by the Departmental Safety Officer and are largely now resolved.

- A number of staff have been identified for Rewarding Excellence nominations.

- Complete review of the Performance Review process and forms used by Chemistry has been undertaken to ensure that all relevant aspects are covered in the discussions; revised system to be introduced in 2014.
Please note that all Performance Review forms were considered by the Departmental Personnel Advisory Group and Academic forms are also reviewed by the appropriate Academic Group Leaders.

- Forms were divided by staff category and distributed to members of the Personnel Advisory Group for review. Each member of the group was responsible for completing a report for the Head of Department outlining training requirements; health and safety issues; factors aiding staff to perform well; barriers to achievement and interventions that could remove them; and any other significant issues.

- The Personnel Advisory Group held a meeting in January 2013 to discuss the reports and identify all action items and training needs to be addressed by the Department.

- Academic Group Leaders also met in January to discuss general themes resulting from the reviews of members of the different academic groups.

2013 / 14 training:

The Department is very supportive of staff attending internal courses run by the Learning and Development Team and many staff have taken advantage of the fact that the Department has always made staff time available for this CPD (see the HR website for details of courses run www.york.ac.uk/admin/hr/training/)

Training allocated from the 2012-13 Chemistry training budget included:

Helen Burrell Open University Modules
Sam Hart Agilent X-Ray Crystallography User Meeting
David Pugh Teaching Fellows Conference
David Pugh, Nigel Lowe and Mike Rogers ViCE/PHEC conference
Amanda Dixon HPLC/GC Troubleshooting and Maintenance
Simon Grist Python Programming
Chris Mortimer/ Wayne Robinson/ Mach Show Tooling Seminar
Jon Hamstead

A number of other provisional allocations of the budget have been made with further detail/confirmation required from the requestor.
Changes to the Performance Review Process for 2014

The Chemistry Performance Review Working Group met in May to improve documentation and procedures for 2014. The group felt that it was of utmost importance that every reviewee feels satisfied that they will gain a benefit from the Performance Review process.

In response to feedback from the 2013 performance review process, it was agreed that the Department should move away from the alternative reviewer year system and that line managers should continually review the staff they manage. This will not be possible for everyone due to the limit on the number of staff who can be allocated to one reviewer. In this case the line manager will designate the review to someone they feel is appropriate. It was agreed that, where possible, Academic Group Leaders will review academic staff in their groups and that the HoD will review Academic Group Leaders.

Please note that the maximum number of reviewees allocated to each Reviewer is set at 10, in accordance with University guidelines. You may find, therefore, that the Reviewer allocated to you is not the individual that you would expect. The department runs a mentoring scheme and we are recruiting a Skills, Training and Employability Officer to help provide additional impartial advice to staff, including research staff.

Your reviewer should ask you who you would like to be contacted for feedback, please pick colleagues that you work closely with and who can provide constructive feedback on your performance. If you are an academic staff member, please include any support staff that you work with to provide feedback.

Please note that there have been substantial changes to the forms for 2014. Please follow the guidelines and use the correct form (we now have two forms: one for Academic, Research and Teaching staff and one for Support staff but the initial and ongoing forms no longer exist); you will find the correct one attached to the email you receive about your reviewer.

All forms should be completed electronically and submitted electronically. The deadline for completion of all Performance Reviews is Thursday 18 December 2014 and forms should be returned to the HoD office email: chem-admin@york.ac.uk by this time (attachments to be included).

The website will be updated with all of the correct information as soon as possible:
http://www.york.ac.uk/chemistry/internal/staffinfo/hrinfo/perfrev/
Launch of Innovative Doctoral Training in Chemistry – Wednesday 1 October

The Chemistry Department is pleased to announce the launch of its Innovative Doctoral Training in Chemistry (iDTC) programme. All new and existing research students and their supervisors are invited to attend the launch event which will be held on Wednesday 1 October between 4pm and 6pm. An email will be circulated to which you will be asked to respond if you wish to attend, for purposes of catering.

All new Chemistry research students are invited to participate in the iDTC training programme. The iDTC offers a core set of training packages for all, and students, in consultation with their supervisor(s), then select specialised theme-specific training in the area of their research. Students may select courses from other themes where appropriate.

Another unique aspect of the proposed iDTC is its focus on recruiting and supporting international students, which we believe will make up an increasing number of the graduate student cohort in the department over the coming years. The international theme is a cross-theme training package designed to address the specific needs of international non-EU students. The training packages in this theme will be closely associated with supporting language and communication skills as well as fundamental chemistry knowledge. This will be achieved through tailored courses delivered by the Centre for English Language Teaching (CELT) on pronunciation, presentations and scientific writing; TAP report writing sessions; and by providing access to appropriate undergraduate courses (via lecture capture or attending actual lectures where there is capacity).

Current PhD students may choose to take relevant courses from the programme.

The diagram to the right shows the different themes:
I was asked to chair a session “to present vivid historical remembrances of the early days of protein crystallography by the early practitioners in a way that connects these early efforts to the most recent accomplishments of structural biology.” This meant making an invidious selection of six speakers from the survivors.

The final line-up covered a fair range of the important early breakthroughs.

I summarised the “pre-history” of the field, linking the early contributions of Lawrence Bragg, (Nobel Laureate 1915) the senior sponsor of the field for many years, J.D. Bernal, a passionate and inspiring crystallographer who supervised both Dorothy Hodgkin and Max Perutz (Nobel Laureate 1962) in the 1930s, Dorothy Hodgkin, a brilliantly gifted crystallographer who chose the field as a student because it would enable her to “see complicated molecules”, Max Perutz who persevered in the haemoglobin research for many years, always believing that in the end the solution of such a complex molecule was possible, and David Phillips, who organised the techniques for structure solution, and became the first crystallographic statesman.

Michael Rossmann was part of the haemoglobin team working with Max Perutz at the Laboratory of Molecular Biology (LMB), Cambridge, where the first protein structures were determined by X-ray crystallography: myoglobin (in 1959) and haemoglobin (in 1960). He has gone on to found a world-renowned structural biology laboratory in Purdue, Indiana, solving many proteins, and being a founding father for viral crystallography.
Brian Matthews had also been at the LMB, working with David Blow in the 1960s. He was born in Adelaide (as was Bragg), and he told of meeting Lawrence Bragg then, and reminiscing about horse trams – Lawrence Bragg followed them as a small boy, and Brian's grandfather had driven them! Brian also covered some of the pre-war history, quoting from Bernal's papers on the first observation of diffraction from a protein crystal (1934), and speculation about the mechanisms of protein folding, and the theory, if not practice, of isomorphous replacement to determine phases.

Steve Harrison told of the steps towards the first virus structure. He is another founding father of virus crystallography, publishing a 2.9A structure of Tomato Bushy Stunt Virus in 1977. The crystallography was technically extremely challenging; the viral crystals had large unit cells which required new equipment to be designed, the amount of work to measure so much diffraction was daunting, and the computing requirements pushed worldwide resources to their limit. However the crystals grew quite easily; the first ones had been photographed by Bernal et al in 1938, and there was a good theoretical understanding of the likely 5:3:2 symmetry expected for the icosahedral capsid. This symmetry was confirmed by an electron micrograph image reported in 1970, and the symmetry allowed for clever phase improvement methods to be devised and programmed.

Phil Evans entitled his talk: “Not Quite the Beginning: Early days in the 1970s in Oxford.”

He was a student in David Phillips' department, working on a large enzyme, phosphoglycerate kinase. This was a time of consolidation. The methodology was established, but there was still room for new ideas. I worked with him closely at the time, agonising over data processing, and how best to estimate errors. This led us to a consideration of Bayesian statistics under the guidance of a mathematician, Simon French!

At the time there was a completely free exchange of software within the crystallographic community. Was this theft? It never occurred to us – there was no system of licensing, and no belief that such a thing could exist! All work and funding was aimed at determining the best structure, and programming skills were just part of the armoury to get this done, and all efforts were shared. It was these ideas which led to the establishment of the very successful “Collaborative Computing Project 4” (CCP4) in 1979.

Ted Baker spoke on: Protein crystallography in the 1970s: starting from scratch in New Zealand.

Ted had worked on the insulin structure with Dorothy Hodgkin, and returned to a position in NZ in 1970. He demonstrated that with a supportive department and generous friends in other NZ universities, tenacity, and a make-do approach, biological crystallography could flourish with minimal resources. He elegantly solved the structure of an enzyme, actinidin, in 1976, learning biochemical,
and programming skills on the way. He & his biochemist wife, Heather, then came to York in 1977 to work with me on first writing a least squares fast fourier based refinement program, then applying it to actinidin. We struggled to get the code right, but our first successful run reduced the R factor by an unprecedented 9%. Ted told of spending the evening afterwards in the Minster listening to The Messiah and feeling very like joining in the triumphant choruses.

Helen Berman spoke on: The history of the PDB as a public resource for enabling science

The wwwPDB is possibly a unique resource: it is an archive of most of the structural information available for macro-molecules. It includes set of coordinates derived from X-ray, NMR & Electron Microscopy studies, plus much of the experimental data used to determine these structures. There are now over 100,000 entries freely available to all. Helen has been involved with the project since its inception in 1971, and has been the Director for the past fifteen years. It is recognised as a towering achievement for the community and the organisers, and she speculated on the reasons for its success.

By 1973 the PDB archive was up & running, when its founder, Walter Hamilton died very suddenly. The youthful post-doc Thomas Koetzle took over the direction, and a very democratic bottom-up organisation came into existence, as the young people left on the staff struggled to realise Walter's dream. Helen now believes this bottom-up collective action can work better than top-down enforcement. There was wide discussion over how the aims were to be achieved, involving both users and workers. The IUCR gave the project its blessing and support in enforcing some rules, but allowing these to adapt to changing circumstances.

The outstanding themes of all the talks were: innovation, but also sharing of ideas and results; excitement, as new structures led to fresh insights into biochemistry and evolution; and an underlying friendship between the practitioners. There were a wonderful set of meetings which cemented international friendships, well remembered by those lucky enough to be there; ones in the Austrian Alps where Max Perutz led both the lectures and the skiing; the first Cold Spring Harbour meeting in 1971, when there was a small avalanche of new structures to report; the first Erice meeting in 1976, when Steve Harrison showed the first virus structure.

The audience seemed to enjoy the résumé of the past – although someone sent this quote from Jim Watson, who once remarked sardonically that, “In some circles, an interest in the history of one's field is regarded as a sign of declining powers.” But George Santayana warns us that, “Those who cannot remember the past are condemned to repeat it.”
Highly Satisfied Chemistry Students at York

A remarkable 96% of our students are happy with the quality of their chemistry degree here in York

The recently published 2014 NSS results show that 96% of our students are satisfied with the quality of their chemistry degree here in York.

Not only that, but looking at the survey in more detail shows our students are increasingly happy with the unique way we teach and support them in their learning.

For example, student satisfaction has increased with:

- the quality of our teaching (+3%)
- the level of academic support we provide (95%, +3%)
- our organisation and management (90%, +1%)
- the learning resources they can use (93%, +6%)
- the structured opportunities we provide for student personal development (89%, +4%)

With well over 95% of our students finding that our dedicated and professional staff explain things well, capture their interest and make their degree intellectually stimulating, it is clear that York is one of the very best places to study chemistry in the UK.

Head of Department, Professor Richard Taylor said “I was most pleased to see that 97% of our students commented on how well our lecturers explained themselves and 97% found the lectures intellectually stimulating. The most important thing is to keep improving. The first year undergraduates arriving in September go into brand new professional-standard teaching labs and plans are afoot to improve our assessment and feedback procedures. These results are good - but we can, and will, improve further”

Suggestion Box

Reminder: there is a Suggestion Box located next to the pigeon holes in the foyer of A Block and one outside Room K167 for YSBL staff. Suggestions from staff are most welcome. All suggestions are discussed at the departmental communications meeting.
Every three years, the International Union of Crystallography (IUCr) hosts a broadly-scoped meeting attracting thousands of delegates from around the world. Recent meetings have been held in Florence (2005), Osaka (2008) and Madrid (2011), and now it was Montréal’s turn. 2014 is UNESCO’s International Year of Crystallography, serving as a reminder that a hundred years have passed since Max von Laue was awarded the Nobel Prize for his discovery of the diffraction of X-rays by crystals. No pressure on the Montréal meeting organisers, then…!

The meeting followed a well-established format, and as usual the facilities were excellent and the schedule packed. Although some of the provision was questionable (such as weak American-style coffee, and the over-amplified music at the conference banquet making networking impossible), the scientific program was outstanding.

The meeting started with a series of “pre-conference” workshops which gave the early birds a wonderful opportunity to find out more about new technical and methods developments, in particular, X-ray Free Electron Lasers (XFEL) and new ways of bootstrapping the phasing of high resolution structures beginning from fitting helical fragments.

The microsymposia for macromolecular crystallography ranged widely with result-based sessions where the emphasis was on the X-ray structural contribution to biological processes; for example, there was a wonderful session describing insights into the path of HIV infection, another dealing with details of immunology response, and several excellent presentations giving details of membrane transport.

The IUCr congress has always been special to me, and I was delighted to speak for the first time, presenting my treasured results to such a large audience. My talk was part of the session entitled Beginners’ guide to Validation of Crystallographic Results, chaired by Bernhard Rupp and Bernie Santarsiero. The big room was packed with hundreds of people, including many distinguished crystallographic veterans. A number of attendees were posting live messages to social networks, including pictures of slides with comments or quotes from the speaker. I must confess that, in the middle of my talk, it felt very weird to have part of the audience looking down at a bright spot. The whole experience was very valuable; there were thought-provoking questions and a suggestion that...
will be incorporated into my sugar validation software. Despite enduring more than ten days away from my wife and daughter, and two sleepless nights, the experience was well worthwhile, and I am grateful to CCP4 and the IUCr (via a bursary) for the financial support which enabled me to attend.

This year was also special in that I had the privilege of travelling with Prof. Eleanor Dodson. Eleanor chaired a session entitled The beginnings of biological crystallography, with speakers who had developed innovative ideas in the 1960s. Her session was charming and instructive, giving positive proof that our community was built on a strong sense of camaraderie, that we younger set must rekindle and expand. The meeting also highlighted to me the sustained contribution by alumni of the York Structural Biology Laboratory (YSBL) to X-ray crystallography: in addition to the session chaired by Eleanor, and my talk, at least eight other presenters and chairpersons – that I am aware of – had been part of YSBL at some point in their respective careers.

KMS Prize Winners' Seminar and Poster Session

The KMS Prize Winners' Seminar will be taking place on Wednesday 8 October at 2.30pm in room A101.

Everyone is welcome to attend the event which will feature talks by our three prize-winning PhD students:

Kate Horner - PBK
Babatunde Okesola - DKS
Kirsty Davey - ISS

The Winners’ seminar is once again being combined with a poster session for PhD students who have just completed the first year of their research. As part of the skills training being offered to research students, all those entering Year 2 are being invited to display a poster about the first year of their research. The aim of this session is to provide students with an opportunity to practice their poster design skills before going to conferences and other events. The posters will be on display during the tea break with an informal competition where attendees can vote for their favourites. Students wishing to participate in the posters session should contact the Chemistry Graduate Office if they have not already done so.
RSC Outreach Fund Awarded to GreenSTEMS Initiative at York

GreenSTEMS is a new science group at the University of York building an interdisciplinary platform where early-career scientists – from STEM fields as well as social sciences - can share resources and connections under the common aim of achieving sustainability.

Despite being only two months old, the greenSTEMS team have been awarded £2000 from the Royal Society of Chemistry Outreach Fund for an innovative training and outreach proposal!

The winning project is called Green Reactions and will run throughout the upcoming academic year in collaboration with an expert in the public perception of technology, Dr Thomas M. Roberts from the University of Surrey. This initiative will bring together York scientists and the general public in a face-to-face two-way dialogue about awareness and perception of green technologies being developed at the University of York.

It is vital that whilst developing science and technology of significant public relevance, such as green technologies, early-career scientists learn how to engage in a dialogue with the public and to address questions and concerns in a timely and confident fashion.

Genetically modified organisms, carbon capture and storage, wind farms and nuclear power are all examples of technologies that have received public hostility, at least in part, because of poor communication of the risks and benefits involved by the technical and scientific community to the general public.

By providing professional public communication training to 15 early-career researchers in sustainable science fields and organising themed public dialogues, this greenSTEMS project aspires to build local public trust in scientists and sustainable technologies as well as to empower young researchers to effectively communicate their research.

The greenSTEMS team will soon be recruiting candidates, so if you are interested in this unique opportunity contact them at greenstems@york.ac.uk. Find out more about the greenSTEMS initiative by visiting gstems.wordpress.com, following @greenstemsUoY on Twitter and liking the group page on Facebook www.facebook.com/greenstemsUoY.
Join the free ACS webinar on 4th September, 7-8pm

The greenSTEMS initiative is promoting and will be participating to the upcoming ACS webinar dedicated to identifying what can be done to incorporate green chemistry into all parts of the industry sector.

If you want to learn more about the fast-growing area of sustainable chemistry and its contribution to an innovative and vibrant sustainable society, you should attend this free international discussion by the title "Planting the Seeds for Sustainable Chemistry" organised by the American Chemical Society (ACS) with speakers from the Network of Early-career Sustainable Scientists and Engineers (NESSE).

Finding innovative solutions to the challenges of today requires confident and skilled professionals able to forge fruitful collaborations, connect across disciplines and communicate their ideas, all with a focus on sustainability. Dr Jennifer Dodson (post-doc at University of York and Chair of NESSE) and Dr Cliff Coss (Chief Technology Officer of GlycoSurf and Vice-Chair of NESSE) will discuss how early-career scientists can create a powerful community to accelerate the move towards a more sustainable society, underpinned by science & technology.

The webinar will highlight:

- The aims and need for sustainable chemistry
- The barriers and challenges to developing and implementing sustainable chemistry and technology
- The desire of industry for professionals with the skills and connections to innovate sustainably
- How early-career scientists can connect, share skills and communicate across disciplines to develop the solutions to spread sustainable science & technology

Join the discussion about how we can build a community of young science & engineering professionals creating innovative sustainable solutions to the most pressing challenges within society.

Pre-register for free at: http://www.acs.org/content/acs/en/events/upcoming-acs-webinars/sustainable-chemistry.html

Contact greenstems@york.ac.uk for further details and for attending the webinar together with members of the greenSTEMS group.

greenSTEMS : gstems.wordpress.com  |  NESSE : sustainablescientists.org
Green Impact’s Plant Pot Free Give Away—24 September

Green Impact is an environmental accreditation programme run as part of the University's Carbon Management Plan. It aims to recognise and reward people's green habits in the workplace.

The Department of Chemistry is currently taking part in the Green Impact scheme. We are attempting to reduce our carbon footprint by implementing various actions within the department. Last year we gained a Bronze Award and this year are going for Silver.

One very simple step people can take is to have one or more house plants in their office or workspace. House plants can help remove pollutants from the atmosphere, give out oxygen and generally help make a healthier and more pleasant working environment.

We will be having a Plant Pot Free Give Away Table in A Block Foyer on Wednesday 24 September. You will be able to take away a cutting to nurture, acquire an established plant or swap plants you no longer want.

We will need donations of houseplants – big or small or cuttings for growing on. If you have any unwanted houseplants or cuttings then please contact Angela in C/D210 or email her on angela.longman@york.ac.uk before the day, or just come along with your plants.

Claim 20p per mile if using your bike on University Business!

Claim 20p per mile if using your bike on University Business!

See https://www.york.ac.uk/staff/finance/forms/mileage/

Combined Folding Bike and Bus offer!

Buy a Folding Bike and 100-trip Unibus ticket and save £127.99!

See below for details of the Folding Bike:

http://dahon.com/mainnav/folding-bikes/single-view/bike/vybe_c7a-1.html

RRP is £380

Carry-bag (bike needs to be in a bag if taking on a bus)

RRP is £47.99
100 Trips on Unibus to be used anytime!

RRP is £100.00

This ticket can be used either to or back from the railway station to the University of York Campus or any stop in between, also valid on routes 27 & 844 to York City Centre and route 20 to Monks Cross Shopping Centre

University Staff Total Price £400 saving of £127.99! if you surrender your current car parking permit it makes it even cheaper! £350 this will mean that you will be unable to apply for a parking permit within the transport year.

For information on the folding bike and bus pass offer, see http://www.york.ac.uk/admin/estates/transport/parking/permits/index.html or email Fiona.Macey@york.ac.uk

Cycletowork Extra

http://www.york.ac.uk/admin/hr/resources/forms/rewards_extra/cycletoworkextra_faqs.pdf

You are able to make big savings on the cost of new bikes and related safety and security equipment under a Government initiative (Green Transport Plan) aimed at getting more people to travel to work on their bikes. The University of York has linked with a partner company, 'Cyclescheme', who provide cycle purchase vouchers that are accepted by a wide range of bike retailers. The University offers a scheme, Cycletowork Extra, whereby you can order a Cyclescheme voucher to purchase a bike and additional safety equipment, worth up to £1,000 in total, through a salary exchange agreement with the University over a 12 month period.

Your nearest cycle storage locations can be found here:
http://www.york.ac.uk/admin/estates/transport/cycling/storage/index.html,
Macmillan Coffee Morning

Date for your diaries! Macmillan Coffee morning Thursday 25th/Friday 26th September:

The 19th annual YSBL/Chemistry coffee morning raising funds for the Macmillan cancer care charity will be held on 2 consecutive days this year!

The event in the Biology atrium will be on the morning of Thursday 25th September due to a postgraduate event being held on the usual Friday slot. However the event in the Chemistry Coffee room will be on the next day, Friday 26th September, our usual date coinciding with similar events being held all over the UK.

Donations of cakes and biscuits are very welcome...indeed necessary for the events to run!

Please be in contact with helen.burrell@york.ac.uk for the event in chemistry and shirley.roberts@york.ac.uk for the event in biology.

Many thanks in advance!
Chemistry in the Staff League 2014

**MATCHES**          **WON**       **LOST**    **ABAN**        **POSITION**
5                     3             1             1              1st

**RUNS/WKT.**  **RUNS/WKT.**               **RUNS/OV.**  **RUNS/OV.**
**FOR**       **AGAINST**                        **FOR**        **AGAINST**
25.4                  11.3                           5.1           4.8

**HIGHEST WICKET PARTNERSHIPS   FOR 2014**
1\textsuperscript{st}  97   J. Lynam + Salman Syed v. Rollers
2\textsuperscript{nd}  50     J. Lynam + G. Hemsworth v. PDP
3\textsuperscript{rd}  95     J. Lee + S. Duckett v. S + N
4\textsuperscript{th}  23     J. Lynam + G. Hemsworth v. Alcos.
5\textsuperscript{Th}  25     P. O'Brien + M. Burns v. Biology
6\textsuperscript{th}  20     M. Burns + R. Wood v. Biology

No records broken again this year but a much more successful season with chemistry once again winning the league after finishing bottom in 2013. The reason is shown clearly in the runs / wkt against figure. 37 in 2013. 11 in 2014. The return of Grogan and O'Brien and the return to form of Wood and Burns clearly significant. In fact if you add the batting of Lynam and Lee it has been the staff members who have dominated this season. Hopefully 2015 will see a new crop of cricketing graduates.
ACS Fall Conference 2014

This year the ACS Fall Meeting was held in San Francisco, CA from 10–14 August 2014, and was attended by three members of the Fairlamb group: Tom Ronson, Nasiru Yahaya and Josh Bray. Nasiru and Josh presented their work at poster sessions and Tom gave an oral presentation, all of which were well received. Talks were also given by Profs Robin Perutz and David Smith. With over 15,000 attendees there was a vast array of scientific presentations to choose from in addition to a number of more informal social events for free beer, live music and networking. San Francisco bay is a fascinating area to explore with much to offer, from the Golden Gate Bridge to the Napa Valley. The next ACS Fall meeting is in Boston, MA – see you there!