Calendar of Events

Postdoc Research Symposium
Date: Friday 30 October
Time: 3pm—6pm
Location: A101

UCAS Days
Date: 2, 5, 10, 12, 16, 19, 23 & 26 Nov
Time: 12.30pm—4pm

Chemical InterActions Careers Seminar
Speaker: Dr Annie Hodgson
Date: Tuesday 3 November
Time: 1pm—2pm
Location: A122

York-Poitiers Symposium on Green Chemistry
Date: Tuesday 24 November
Time: 10am—5pm
Location: GCCE, 1st Floor F Block

Departmental Seminar
Speaker: Dr Stephen Moggach, University of Edinburgh
Date: Wednesday 25 November
Time: 1pm—2pm
Location: A101
Carbon Dioxide Photoreduction

Catalytic carbon dioxide photoreduction with rhenium-bipyridine-zinc porphyrin dyads has potential for storing solar energy in chemical bonds.

This approach to “solar fuels” provides a product that could be used as a chemical feedstock or as a fuel and is complementary to the established photovoltaic technology. To achieve the photoreduction with visible light, we need a photosensitiser – here the zinc porphyrin – and a catalyst, the rhenium tricarbonyl bipyridine unit.¹ This study depended on synthesis and photocatalysis carried out in York by Chris Windle and ultrafast time-resolved spectroscopy performed by Mike George and his group in Nottingham. We show in this paper that the number of turnovers can be increased by a factor of ten by including a CH₂ group in the linker between the two halves of the dyad, so increasing flexibility and removing the last vestige of conjugation. It all sounds very logical until we find that the cationic rhenium complexes with methylpyridine as the sixth ligand track the catalytic behaviour of the neutral bromide complexes. This should not happen because their redox potentials are quite different. We also find that the primary photochemical events following light absorption by the dyads with Re-pyridine linkage are totally different from those for the dyads with Re-Br bonds. All this points to these dyads as pre-catalysts, so what then are the real catalytic species? According to our theories partial hydrogenation at the porphyrin may hold the key.

The University of York’s Department of Chemistry has had its Athena SWAN Gold award renewed for a further three years, making it the longest held recipient of the Gold award on record.

The Athena SWAN awards recognise commitment to tackling gender inequality in higher education and celebrating good practice in recruiting, retaining and supporting the careers of women in Science, Engineering and Technology (SET).

York’s Department of Chemistry was the first in the UK to obtain the Gold award in 2007, before achieving a renewal in 2010. The announcement of a second renewal marks eight years of award retention – the only department in the country to stay this long at Gold level.

Professor Duncan Bruce, Head of York’s Department of Chemistry, said: “This is the most wonderful news for the Department and for all the members of the Equality and Diversity Group, for whom this result is just reward for a huge amount of work in preparing the application.

“Over the years, we have begun to embed principles of equality into everything we do and, as we move forward, we shall develop further positive approaches to the growing agenda around diversity, too. The award does not mark an end, rather the beginning, of a commitment to actions in the coming years that will enable us to position ourselves even better to address gender equality. This work will influence our approach to everything that we do.”

Professor Paul Walton, Professor in York’s Department of Chemistry, Chair of the Department's Equality and Diversity Group and an internationally renowned speaker on gender equality issues in science, said: “We are very pleased indeed to have our achievements in gender equality recognised with the first ever Gold award in 2007 and now a second renewal eight years later. It shows that culture change can be achieved and, most importantly, maintained.”

Dr Helen Coombs, Departmental Manager in York’s Department of Chemistry and a member of the Equality and Diversity Group, said: "We very much hope that the initiatives we have introduced to encourage and support women in science, show our commitment to wider equality and diversity and actually benefit all staff and students.

“A large number of staff and students contribute to the equality work within the Department and we are proud of this team achievement; there is still a lot of hard work to be done but the renewal of the Gold award really helps to motivate us to continue."

The University of York also holds an institutional Bronze award which was also renewed.
Researchers in the Green Chemistry Centre of Excellence (GCCE) have launched a service to design and produce environmentally friendly solvents for industrial purposes.

The Sustainable Solvent Selection Service (S4) will produce safe, renewable alternatives to traditional solvents - industrial chemicals needed for manufacturing, cleaning, and the separation of substances.

Around 20 million tonnes of solvents are consumed annually across the world, and are often used in far greater quantities than any other manufacturing chemical. Typically volatile organic compounds, conventional solvents are responsible for air pollution through smog formation and ozone depletion, and are often flammable, explosive and toxic.

Now, strict legislation is addressing the problem of dangerous chemicals, resulting in the imminent ban of several vital solvents. In order to provide alternatives, S4 will design bespoke benign solvents for industrial processes, made from renewable resources with a low environmental impact.

One such solvent is Cyrene - a new bio-based solvent produced from forestry by-products including sawdust. Created in partnership with the UK branch of Circa Group, Cyrene is biodegradable and less toxic than conventional solvents due to its unique chemical structure.

Circa Group has a long-standing partnership with the GCCE. Recently awarded an ERDF Capital Grants Scheme issued by the Biorenewables Development Centre, a new computer installed with state-of-the-art solvent modelling software (COSMO-RS) has been purchased by Circa Group for the generation of a family of new, green solvent candidates.
Professor James Clark, Director of the GCCE, said: "S4 is providing the means to address the serious safety, health and environmental problems with solvents - common industrial pollutants - with commercially relevant research and product development.

"We are delighted to announce our new capabilities in solvent design, including our partnership with Circa, and we hope this will lead to more examples of greener, sustainable solvents in the near future and will strengthen our position as a leader in alternative solvent research."

S4 includes a bespoke Industrial Engagement Facility for business to business and business to academic discussions, solvent design and product testing, and will establish new commercial supply chains with key partners, including solvent users, manufacturers and expert groups.

Reach-Out Event at the European Liquid Crystal Conference, Manchester, 7th – 11th September

The evening of the first day of the European Liquid Crystal Conference in Manchester, which was open to the public, was uniquely devoted to Reach-Out activities. The main event was a presentation given by Prof. John Goodby and Dr Stephen Cowling entitled: Liquid Crystals – Nature’s Delicate and Prosperous State of Matter. The “show” as they call it lasted for one and a half hours and ranged from art to film to music, and involved many scientific demonstrations on the way where the audience were introduced to the true sensory nature of liquid crystals and how this unique state of matter pervades everyone’s lives. The audience of approximately 300 from a diverse range of backgrounds rose to the occasion in their participation, as shown in John’s “selfie”, and in their standing ovations received at the end of the “show”.

John Holman Presented With Kavli Education Award

Professor Sir John Holman was presented with the Kavli Education Award at the Royal Society on 13th October, and gave the Kavli Education lecture on ‘The big unanswered questions in science education’ to an audience of scientists and education research specialists.
Atmospheric Chemistry researchers from the Department of Chemistry have been providing expert commentary on the recent VW emission scandal.

Atmospheric Chemistry researchers from the Department of Chemistry at the University of York have been providing expert commentary on the recent VW emission scandal to a variety of UK and international media organisations. Much of the original research that demonstrated the mismatch between predicted and measured levels of nitrogen oxides (NO & NO\textsubscript{2}) in the UK, has been carried out at the University of York in the Wolfson Atmospheric Chemistry Laboratories (WACL). WACL is the only dedicated atmospheric chemistry building in the UK, housing world leading researchers from both the chemistry Department and National Centre for Atmospheric Science (NCAS).

Nitrogen oxides (NO\textsubscript{x}) emitted from diesel cars are of great importance to public health and are known to cause lung irritation in the short term, with longer exposures at sustained high levels promoting cardiovascular diseases (Atkinson et al., 2013). Recent studies by experts from WACL, have highlighted the mismatch between real-world NO\textsubscript{x} and expected concentrations based on industry estimates. A recent study by Lee et al., (2015) showed almost twice as much NO\textsubscript{x} being released in London compared to that predicted by the UK’s National Atmospheric Emission’s Inventory (NAEI), The study used a novel measurement method that ‘looked down’ on central London from the BT Tower.

Discrepancies between the predicted and observed NO\textsubscript{x} from vehicles operating under under ‘real world’ conditions was reported in Carslaw and Rhys-Tyler, (2013). This work found NO\textsubscript{2} emitted
from individual diesel vehicles was much higher than reported by car manufacturer testing. View a more in-depth discussion on this subject by David Carslaw into both health effects and scale of NO₂ emitted on the UK’s roads.

Whilst the media focus of attention recently has been on NOₓ, diesel vehicles also emit other classes of pollutants. In a separate study published two weeks ago, Dunmore et al., (2015) showed for the first time that unburnt diesel fuel was present at levels up to 70 times higher than predicted in London air. Unburnt diesel fuel in air is important since it leads to the promotion of secondary pollutants such as Ozone (O₃) and particulate matter.

Hello Everyone and thank you all so much for supporting the annual MacMillan Coffee Morning this year!

Together we were able to raise a total of £775.90

This would not have been possible without many helping hands on the day and during the preparation and of course not without all the lovely bakers who put so much effort in creating a broad variety of treats for us! So thank you all again!

I especially want to thank Shirley Roberts once more, who started organising the event 21 years ago and kept the tradition going and who gave us so much support and advice making this year’s event another success.

We would also like to thank Helen Burrell in Chemistry for organising a sister event in their department and generously contributing to our total!

Thank you all again and we hope to see you again next year!

Becky, Claire and Tamara
Hydrogen Bonding to Metal Fluoride Complexes

Every chemist knows about hydrogen bonding or thinks they do.

Yet, try to answer a few questions about hydrogen bonding to the ligands in the immediate vicinity of a transition metal.

- Which metal fluoride will form the stronger H-bond, a d^0 complex of very electropositive metals or a d^8 complex of rather electronegative metals?

- How do H-bonds to metal-fluoride complexes compare as H-bond acceptors to organic molecules? Are they like pyridine or like trimethylamine-N-oxide? Where would they sit on the scale of H-bond strength?

- Molecular assemblies based on H-bonds are commonplace, so can we build one on the basis of metal-fluorides as H-bond acceptors?

These are some of the questions we have tried to answer in our new paper in JACS, resulting from our York-Sheffield-Cambridge collaboration. You will find some answers in the diagrams. Maybe we will be able to go to address the H-bonds to the ligands in metalloproteins or those formed during the extraction of metals.


Professor James Clark Lectures in China

As part of the GCCE’s growing interactions with China, last month Professor James Clark gave invited lectures in Suzhou (to an audience drawn from the 3 universities, Chinese Academy of Science and some of the companies in the region), Fudan University (as part of an RSC symposium in Innovation in Sustainability) and Unilever Shanghai as well as giving a talk in Hong Kong to a mixed audience from Hong Kong Polytechnic and Hong Kong City universities. James was accompanied on the Suzhou leg of his trip by Dr Alice Fan and Terry (Tianzong) Li.
On Thursday 15\textsuperscript{th} October, distinguished alumnus Dr Tony Wild visited the Department. Tony was one of the first cohort of Chemistry students to arrive in York in 1965 and, following his first degree here he went on to complete a PhD in Cambridge in the area of gas-phase spectroscopy. There then followed a long and very successful career in the pharmaceutical industry including a twenty-two year stint with Schering-Plough.

Around ten years ago, Tony made a first donation to the Department to support PhD scholarships enabling us to create The Wild Fund, which we have used to support the costs of study in the Department from students from outside of the UK. A very significant pledge in 2010 assured the continuation of the scheme for ten years and now as a result of the visit, Tony has very kindly committed funding for a further ten years.

During the visit, Tony had lunch with previous and existing Wild Scholars, with whom he is pictured above.

**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.
Chemical InterActions Update

The series of careers talks organised by Chemical InterActions continue to be well attended, and with more talks scheduled between now and the end of term, we hope that this success continues. Recent speakers have included Dr Steve Hutchinson, a coach and author working in the training and development field, and Dr Alex Kersting who has held several roles in the RSC and currently works in the qualifications and accreditations team.

Our next two talks feature speakers slightly closer to home. On Tuesday 3rd November, Dr Annie Hodgson will be talking about her career so far and her outreach work. This will be in A122 at 1pm. On Tuesday 8th December (A122, 4pm) Dr Glenn Hurst will be talking about his career leading to his current role as Teaching Fellow as well as involvement in graduate training. Tea and cake will be provided and anyone is welcome to attend.

Recently we have also trialled a showing of a couple of Careers Webinars run by the RSC – these were displayed on a big screen to enable a group viewing. This is something else that we may also look to run again in the future, as well as a careers discussion session that is currently being planned – more details to follow.

We have welcomed some new members to the group recently which is great. If anyone would be interested in joining Chemical InterActions, or if you just have ideas for future speakers /events, please get in touch: chemical-interactions-group@york.ac.uk

“Thermodynamics Teapot” Features on the Front Cover of RSC Food & Function

Dr Seishi Shimizu’s recent paper applying a theoretical physical chemistry approach to the caffeine-caffeine interactions in the presence of sugars and salts has been featured on the front cover of the RSC journal, Food & Function. The “thermodynamics teapot” was created by Shimizu supervisee Frankie North (Biochemistry BSc, 2015), and it features equations from papers authored by Seishi. The paper, “Caffeine dimerization: effects of sugar, salts and water structure,” was also highlighted as a “HOT Article” in the Food & Function blog.
Prof. Lucy Carpenter Competes in World Duathlon

Lucy (Carpenter, competing as Lewis) came back in one piece from Australia, together with her bike, having had a fantastic race experience in the World Duathlon Age Group Championships in Adelaide on the 18th October. The race atmosphere was brilliant, and to race and cross the finish line in the team GB kit was a great honour. Lucy was 13th in her age group and in the top 1/3 of female competitors overall. Thanks to the Department for letting her take an unusual week off!

NERC 50th Anniversary on the RRS Discovery

This year, the Natural Environment Research Council marked its 50th Anniversary. To celebrate, the new research ship, the RRS Discovery, sailed up the Thames and moored next to the HMS Belfast on 7th October. All of NERCs subsidiaries were invited to display their work to invited ministers, business partners, and invited guests. Our team from York took a mock-up of the UK atmospheric research aircraft, to show some of the work we have done to further our understanding of our atmosphere. This was complemented by ‘science busking’ to the public along the river bank.

Image Courtesy of Dr James Lee
Joliot-Curie 2015

For the 5th year running, The Royal Society of Chemistry organized the annual Joliot-Curie conference. This year it was held on the 16-17th September at the Murray Edwards College in Cambridge, UK and was attended by Craig Archbold, Kate Appleby, Dr Ana Campo Rodrigo, Dr Leonie Jones, and Prof. David Smith. Thanks to funding from the Athena SWAN committee, we (Ana Campo and Kate Appleby) had the chance to participate. The aim of the conference is to support the aspirations of early career chemists, particularly those who are underrepresented in research careers in academia or industry.

This was a unique and highly useful event, focused on exploring career topics which are relevant to everyone. Many of the speakers at the conference gave personal insights into their own career journeys, and addressed the hardships they faced as a result of prejudice. This diverse program included workshops, one-to-one consultations, and keynote speeches.

On the Wednesday, the talks focused on the multiple pathways to success and how to network effectively. It was interesting to see people from diverse professional backgrounds, who have been working in both academia and in industry at various points in their careers, share their professional experiences of working in both sectors. The tips given by the RSC members about how to be successful at networking were both very clear and straightforward to follow. Also both group and one-to-one mentoring sessions provided an informal and relaxed place to discuss the concerns researchers have on how to develop a successful career.

The first day of the conference included a talk from Nazira Karodia on ‘Negotiating Education, Apartheid and Inequality; notes from a life and career informed by pragmatism’. Nazira’s talk was very emotional and moving and we felt privileged to hear her very personal story. This was followed by three talks from Jane Clarke, Cecilia Fenech Brincat, and Nessa Carey which focussed on ‘Multiple Pathways to Success’, including both industry and academia. This session, in addition to many later sessions, was followed by a panel discussion, during which the audience asked the speakers about their experiences, but the speakers also asked the audience about their experiences and thoughts on careers in industry and academia.

On the Thursday, the workshop focussed on promoting cultural change and mentoring schemes. We
had the chance to see that in research, it’s not only the science that matters but human rights and personal circumstances are also involved. In addition, we learnt about the important role of the mentor and the mentee in any career decision. Everyone should have the opportunity to be mentored and this is something the RSC offers. There were talks from David Smith, Alison Roger, and Tinu Cornish. Despite inequality persisting in chemistry, this session was very positive, and encouraged us to take a proactive approach to overcome inequality. In addition to the talks, several small group discussions on different topics took place, as well as 1 to 1 discussions. This was particularly useful, as you could sign up for a 1 to 1 discussion on anything you liked (obviously to do with your career progression!).

Breaks and the conference dinner provided useful opportunities to have a relaxing chat with the other attendees. This conference was an invaluable opportunity for those of us in our early careers or even for PhD students to network and learn from speakers in the field as well as each other about what the future holds for us.

New Starters

Kirstan Lounsbach, Undergraduate Admissions
Room: DS/111; Extension: 5899; Email: kirstan.lounsbach@york.ac.uk

Mark Sims, PDRA working with Dr John Moore
Room: A057 / E202; Extension: 4525; Email: mark.sims@york.ac.uk

Peter Brauer, PDRA, WACL working with Dr Andy Rickard
Room: G116; Extension: 4758; Email: peter.brauer@york.ac.uk

Dr Anand Manoharan, PDRA, CHyM, working with Prof. Simon Duckett
Room: CHM/114,,; Extension: 8893; Email: anand.manoharan@york.ac.uk

Alan Reay, PDRA working with Prof. Ian Fairlamb
Room: E114 / E102; Extension: 2584; Email: alan.reay@york.ac.uk

Sotiris Katsikis, PDRA, CHyM, working with Prof. Simon Duckett
Room: CHM/114; Extension: 8893; Email: sotiris.katsikis@york.ac.uk

Dr Marta Roselló Merino, PDRA working with Prof. Simon Duckett and Prof. Robin Perutz
Room: CHM/115; Extension: 8894; Email: marta.rosello-merino@york.ac.uk

Dr Thomas Attard, Green Chemistry Research Technician, working with Dr Andy Hunt
Room: F111; Extension: 4547; Email: thomas.attard@york.ac.uk
Success for York at the Daphne Jackson Trust Research Conference 2015

The Daphne Jackson Trust Research Conference was held on 15th October at the Wellcome Collection, London. It was attended by Dr Leonie Jones and our two York Daphne Jackson Research Fellows, Dr Brendan Garrett (Chemistry) and Dr Amanda Noble (Biology). Prior to gaining her Fellowship, Amanda (Mandy) previously spent over a year in Prof. Ian Fairlamb’s lab synthesising fluorescent 7-deazapurines as probes for RNA and DNA polymerases in order to gain experience in a synthetic chemistry laboratory following a career break.

The day began with a panel discussion on ‘Returning to STEM - how do we maximise potential’, followed by a number of excellent research talks from current fellows, with topics ranging from IR and UV spectroscopy of interstellar ice analogues to the analysis of volatile compounds in the breath of liver disease patients. A poster and networking session took place allowing past, current and prospective fellows to meet with sponsors, hosts and trustees.

It was a great day which showcased the work of the Daphne Jackson Trust. It was also a good day for York, as Brendan and Amanda both won their sections of the poster competition! They were congratulated by Maggie Philbin (presenter of Tomorrow’s World and more recently a patron of the Daphne Jackson Trust).

For those who may not know, the Daphne Jackson Trust is a fantastic organisation which provides support for researchers who wish to return to careers in STEM research following a career break. The Department is supportive of Daphne Jackson Trust fellowships. If you are interested in finding out more about this or other fellowship opportunities please feel free to contact Prof. Ian Fairlamb or Dr Andy Goddard. More information can be found about the Daphne Jackson Fellowships at http://www.daphnejackson.org/

Left: Brendan Garrett, Leonie Jones and Amanda Noble at the Daphne Jackson Research Conference.
As a result of a collaborative project with Prof. Duncan Bruce’s research group, CIEC held CPD in YSOC on 24th September. The CPD launched the pilot of a set of primary science activities which will be trialled in four local primary schools. Dr Saleesh Kumar and Prof. Duncan Bruce were on hand to explain the chemistry behind the project and CIEC’s Jenny Harvey and Joy Parvin ran the event.

The teachers all received a copy of the teaching resource from the CPD, and they will now carry out the liquid crystal related activities in their schools with 9-11 year olds, to support and enrich their science curriculum.

A film (Liquid Crystals for Primary Schools, on YouTube), a loan-kit and ambassador visits complete the support for the classroom activities. Following Saleesh’s return to India, Dr Stephen Cowling has offered to provide classroom visits, and other volunteers would be welcome!

Joy Parvin commented, ‘All the attending teachers were delighted that the specialised equipment would be available to borrow and were confident that their pupils would be excited to participate in such motivating activities’.
The KMS Prize Winners’ seminar took place on 7th October and was very well attended by students and staff. The three winners of the KMS competition delivered excellent talks on their research and were presented with certificates by Professor Tony Wilkinson who sat on the KMW panel. Winners and their talk titles were:

Julia Sarju (DWB): C-C Bond Activation: Platinum Catalysed Decarbonylation of Unstrained Ketones

Joshua Bray (IJSF): Rationalising Pd-catalyst Design for Efficient Arylcyanations

Lucy Milner (JML/JMS): Understanding the Mechanism of Ruthenium-Mediated C-F Bond Formation Reactions

The event was combined with a poster session for PhD students entering their second year. The session provided an opportunity for students to share their research with the rest of the Department and 24 posters were on display. The poster session was really well attended, with lots of discussion taking place. People were asked to vote for their favourite poster and the winner was Aimee Clarke (RJKT) for her poster: The Synthesis of Spirocyclic Scaffolds Using Silica-Supported Silver Catalysis.

Congratulations to all the winners and thanks to everyone involved including the KMS panel and all those who attended the seminar.

Aimee Clarke with her poster.

KMS Winners left to right: Lucy Milner, Josh Bray, Julia Sarju
Prof. Richard Taylor’s Lecture Tour of South Africa

Prof. Richard Taylor has just returned from a lecture tour of South Africa funded by the “Knowledge, Interchange and Collaboration (KIC)” programme of the South African National Research Foundation. The first lecture was at the University of KwaZulu Natal (Durban /Pietermaritzburg); the Chemistry Department there runs its own micro-brewery and so the post-lecture drinks session and Braai (BBQ) after the lecture was particularly lively!

Richard then moved west planning to talk at Rhodes University (Grahamstown), but at this point the South African student protest over a proposed fees increase closed the University. This resulted in a rearranged lecture being given at the Addo Elephant National Park (see Photo 1) with vans and cars being laid on to bring the students to the seminar from Grahamstown.

The next stage of the lecture tour was at Cape Town with lectures planned at the University of Cape Town, the University of the Western Cape and the University of Stellenbosch. Again student protests intervened and so a combined lecture was given at Stellenbosch with researchers from the other sites travelling to attend.

Research discussions were also held; Photo 2 shows Richard in deep discussion with Dr Wade Petersen (who will be coming to York as an NRF Overseas Postdoctoral Fellow in January 2016) at Camps Bay in Cape Town. Meetings with Prof. Roger Hunter (University of Cape Town) and Prof. Mike Davis-Colman (University of the Western Cape) were particularly productive. A gruelling trip made easier by the sun, the pinotage and the collegiality of the South African Chemistry Community (including old York friends Ross Robinson and Perry Kaye).
Yornight 2015 (European Researchers’ Night)

Members of the Perutz group (Prof. Robin Perutz, Dr Barby Procacci and George Platt) and associate members of the Perutz group (Kate Appleby and Amy Ruddlesden) organised an exhibit for Yornight (European Researchers’ Night). Yornight aims to show the general public that research is fun and influences daily life for all of us. To celebrate the international year of light, our topic was photochemistry, with a focus on solar energy for fuel.

We prepared a number of reaction samples to show some beautiful colour changes which result from reversible photochemical reactions, and we were able to demonstrate these using our trusty UV nail lamp! Hussni Nakeshbandi had also prepared some samples of fluorescent copper clusters that emit light of different wavelengths at different temperatures and which left some viewers amazed! Liquid N2 was used to cool these complexes down (and to look impressive!). To demonstrate the applicability of solar energy for fuel, we used a small remote controlled car which was fuelled by hydrogen. The hydrogen was generated by splitting distilled water using energy from light, which was shone onto a solar cell. Thankfully, when the light wasn’t intense enough, we could switch the car onto ‘battery mode’; this proved very useful!

On the night, Dr Meghan Halse and Dr Sarah Pike also helped us demonstrate our array of photochemistry goodies in a room which was bustling with visitors. Thanks also goes to Dr Annie Hodgson, who supplied us with everyday examples of the uses of fluorescence, including the detection of counterfeit money, security pens, and washing powder. Lots of the kids enjoyed leaving secret messages for the next unsuspecting visitor! All in all it was a very successful evening, enjoyed by us just as much as by the public.

Kate Appleby and Amy Ruddlesden
Poster Printing

The Department has a Canon printer for printing posters in A0 (841mm × 1189mm) and A1 (594mm × 841mm). Posters will be printed on Fridays; posters should be emailed to tim.elsworth@york.ac.uk with a charge code and posters arriving after 5pm on Thursdays are unlikely to be printed. Posters are printed on 190 g/m² satin paper.

Guidance on producing posters

- Posters should be submitted in both PDF and one of PowerPoint, Microsoft Publisher or OpenOffice Impress formats (PDF format does not always print correctly thus the need for the alternative format).
- Posters should be produced in the required A0 or A1 size. Use the A0 or A1 style to create the original poster. If you enlarge an A4 poster to A0 or A1 it produces very poor quality, you might be charged for printing of this poor quality poster.
- There will be no proof reading, so make sure your poster is 100% correct before submission. You will be charged for every poster printed.

Posters will be charged at £5.00 for A1 and £10.00 for A0.

Information is also available on the web in the IT and chemistry section under the printing tab or at: http://www.york.ac.uk/chemistry/internal/staffinfo/workchem/it/poster/

In the future an electronic submission procedure will be implemented.

Professor David Smith Gives Lecture at St Peter’s School

Nearly 400 York residents attended a lecture given by Professor David Smith at St Peter’s School exploring lifesaving medicines and the latest chemical drug research.

The talk examined the range of different approaches used to develop effective medicines and the crucial role chemists have played in doubling the human lifespan in the past 150 years.

The talk was praised by David Morris, Head of Science at St Peter’s School.
University of York Learning and Teaching Conference 2016

Value added graduates: enabling our students to be successful
Tuesday 7 June

The conference will demonstrate and explore ways in which the degree itself can be the primary contributor to the development of students’ capabilities. It will highlight best practice in the enhancement and embedding of employability and enterprise within learning and teaching, encompassing programme and module design, problem-based learning, collaborative learning, work-based learning, employer engagement, and assessment.

Suggested workshop themes:
- shaping a York graduate: defining, embedding and measuring core skills and attributes through programme design
- the inclusion of employability related module and programme learning outcomes and assessment practices reflecting a distinctive York pedagogy
- the role of active learning and problem based learning in developing transferable skills
- helping students to recognise and articulate skills in the context of the workplace
- the role of learning technologies and social media in the development of key skills
- the benefits of reflective formative, peer and self-assessment
- the incorporation of the new University Employability Strategy within programme design

Posters: Any learning and teaching themes.

Invitation to contribute
We are inviting colleagues to contribute workshops and poster presentations. The deadline for submissions is Wednesday 20 January 2016 (Week 3, Spring Term).
Further information about this conference and the call for contributions is available on the website: http://bit.ly/1Rej27Y

CALL FOR CONTRIBUTIONS