Calendar of Events

Organic Symposium
Date: Wednesday 30 April
Time: 2.30pm
Location: A101
Speakers: Professor Nick Turner and Professor Wayne Hayes

Chemical InterActions Smartphone Quiz
Date: Thursday 15 May
Time: 6.30pm—8.30pm
Location: A122

Speed Networking Event for Research students and Post-docs
Date: 4 June
Time: 4pm - 6pm
Location: A122
More details to follow

Graduate Research Seminar
Date: 11 June
Time: 2pm—5pm
Location: A101

Chemistry Outstanding Demonstrator of the Year Awards (CODYs)
Date: 26 June
Time: 4.30pm—6pm
Location: A102
Professor Goodby Receives AkzoNobel Science Award 2014

Professor John Goodby FRS was awarded the 2014 AkzoNobel UK Science Award in London on Wednesday 5th March at Burlington House. The award itself is presented to an individual in recognition of outstanding scientific contributions in the fields of chemistry and materials science. In addition, the award remit states that the individual must have accomplished significant advances in one or more of the areas described, and his/her findings should have proven, or show promise in leading to, significant sustainable, societal and/or user benefits. Indeed, there has only been one previous winner of this award in the UK in 2012.

The award (and £50,000 prize) was presented to John for his outstanding contributions to liquid crystals and soft materials by Keith Nicholls from AkzoNobel. Afterwards John gave a 45-minute talk about liquid crystals and the vast array of applications that he has worked on during his illustrious career. President of the Royal Society of Chemistry and chair of the prize selection committee, Professor Lesley Yellowlees, commented: “I’m thrilled to be celebrating Professor Goodby’s invaluable contributions to a technology that has a beneficial effect on everyday lives across the world. The field of liquid crystal chemistry is an excellent demonstration of the value of curiosity-driven research and, more than 125 years after they were first discovered by accident, it’s fantastic to be recognising Professor Goodby’s role in what is now a billion-dollar industry.”
Dr Glyn Hemsworth, of the York Structural Biology Laboratory (YSBL) (Department of Chemistry) has won a prestigious Early Career Research Award of the Biochemical Society, in the theme area of Biotechnology (2015).

These awards recognise the impact of research carried out by early career scientists (with no more than five years’ postdoctoral research experience) who have produced international-quality research outputs, and demonstrate aspirations consistent with the potential to achieve world-leading status. The awards are structured to recognise the breadth of science across the Biochemical Society's Theme Panels (calls for nominations are made on a two-year cycle across eight theme areas).


Glyn’s research focuses on carbohydrate-active enzymes and their component domains, notably those involved in xyloglucan degradation and biomass conversion. He has performed extensive structural and spectroscopic investigation of the newly-discovered copper-dependent lytic polysaccharide monooxygenases. Having completed his PhD at the University of Sheffield under the supervision of Professor Peter Artymiuk, he joined YSBL in 2009 and worked for Professor Keith Wilson on the structural biology of dUTPases and other nucleoside enzymes from Leishmania and Trypanosoma (an EC-funded project), before joining the Davies group in 2012.

Notable recent winners of the Biochemical Society’s Early Career Research Awards include Dr Alison Parkin of the Department of Chemistry (2013, Energy and Metabolism) and YSBL PhD graduate Dr Tracey Gloster (2012, Molecular Structure and Function).
Gender Equality Talks in the Week of International Women’s Day

On Wednesday 5th March, Kate Horner presented a talk on gender equality in HEI at a Gender Bias workshop at the Cavendish Laboratories, University of Cambridge. The audience consisted of over 100 academics and staff members from across the physical science departments in Cambridge, as well as a few from other universities. She presented current statistics highlighting the gender imbalance in HEIs across the country and studies into possible causes for this bias. She also discussed the various measures the Chemistry department here in York are taking to promote equality and which support the department’s Athena SWAN Gold Award status. These ideas sparked interesting discussion and debate amongst the audience which continued long after the presentation had finished. There was a lot of positive feedback for the workshop and hopefully it has brought gender equality to the attention of many more people.

On the same day Paul Walton also gave the keynote lecture at the University of Portsmouth’s Athena SWAN conference. Again, the talk was very well attended with over 100 delegates, many of whom had good questions about the work we had done at York, particularly in how we were tackling unconscious bias. Paul then had to jump on a train to get to Bristol the same evening to give an after-dinner speech on gender equality to the EPSRC’s most-funded physical scientists. The speech again led to a long discussion about unconscious bias and also about whether EPSRC should have PIs and Co-Is on grants.

From all of these talks it is clear that many places are taking Athena SWAN and gender equality seriously, and that they are also interested to learn what we have done here at York.

Graduate Research Seminar

The Summer Term Graduate Research Seminar will be taking place on Wednesday 11th June 2014, and research students are invited to register their interest if they would like to give a presentation to the Department about their research. The seminars were introduced last year in response to student feedback which highlighted a lack of opportunities to present work to a wider audience, and to interact with other research groups.

We would like four speakers for the seminar - each to speak for 20 minutes on their research and then have 5 minutes for questions. If you would like to give a presentation on your work, please submit a short (paragraph) abstract to chemgrad@york.ac.uk

We would also like volunteers to chair the sessions, so if you would be interested in doing this, please let us know.
In early March, Dave gave an invited lecture at University of Liverpool on the topic 'LGBT Scientists - Where are They and Does it Matter?'.

This Flagship lecture was organised by the Faculty of Physical Sciences and the University's LGBT Staff/Postgraduate Group. Over 100 people from across the university and city attended, and listened to Dave discuss this 'hidden diversity' issue.

In the lecture, survey data were used to demonstrate the benefits of workplaces supporting LGBT staff, and noted how many such staff working in science although 'out' to friends and family are not in their workplaces. Supportive environments help staff engagement and happiness, and also provide a welcoming atmosphere for students who identify as LGBT, and particularly those who may be struggling with the 'coming out' process. The talk also explored ways in which LGBT scientists can have an impact and change the culture of their institutions.

Although many scientists believe that 'only the research matters', it was noted in the talk that it is vital to treat scientists as individuals, not just 'researchers', when building successful research teams.

York Green Chemistry MSc Graduate Features in The Guardian

Katie Privett, a graduate of the MSc in Green Chemistry and Sustainable Industrial Technology, has featured in an article in The Guardian on 'Five graduates helping the planet'. She graduated in January 2013 and now works for the Green Chemistry Centre of Excellence as a training, education and networks assistant. Her role involves setting up and running networking events between researchers. In addition, she enjoys taking part in community outreach, teaching people about the importance of green chemistry.
Biochemistry Goes into Primary School

Last month, Dr Jean Whittingham led an outreach team from York Structural Biology Laboratory to run a science workshop at St. Wilfrid’s R C Primary School, York. The team included Dr Glyn Hemsworth and graduate students Katie Jameson, Daniel Wright and Rebecca Gregory. The workshop was designed for children at the junior end of the school (aged 9–11 years) and included experiments in which the children extracted DNA from kiwi fruit, decoded a piece of DNA, and grew their own lysozyme crystals. The emphasis for the afternoon of activities was fun and the pupils responded with generous enthusiasm. Thanks to an endless supply of DNA model kits from Annie Hodgson, the children could work in pairs and build their own giant piece of DNA. Rather than being daunted by this task, well-honed Lego building skills were employed to complete the task in super-fast time! At a question and answer session at the end of the workshop there were lots of enquiries about DNA and evolution, and it was with some amusement that the children learned they share 50% of their own DNA with bananas. This workshop was the first of a number planned for science outreach in York primary schools.
CIEC Promoting Science Director Joy Parvin Visits India with a NEPIC - Led Chemical Processing Sector Market Visit

Joy was invited to join a Northeast of England Process Industries Cluster (NEPIC) - led chemical processing sector Market Visit to India in order to talk to leading industrialists about CIEC Promoting Science, the Children Challenging Industry programme and the importance of engaging schoolchildren and teachers with the important chemical processes sector. The delegation was led by Ian Wright MP, Shadow Minister for Industry, whose Hartlepool constituency lies in the north east.

Some of the opportunities Joy was able to take up were:

- A meeting with Jatish Sheth, President of Karnataka Drugs and Pharmaceutical Manufacturers Association, who was interested to find out about CCI

- A meeting at the Karnataka Government Building in Bangalore. We met the Chief Secretary to the Government and various industry organisations, company CEOs and the Chamber of Commerce. I gave a presentation on CIEC-CCI at this meeting.

- Tour of a new AstraZeneca production facility in Bangalore, and as 'distinguished guests' we were all asked to plant a tree.

- Attended a CEO Round Table discussion.

Attended the ICC Conference on Thursday and Friday (6th and 7th March) (7th Annual Outlook Conference). I gave my presentation on Friday 7th and it was very enthusiastically received.

The ICC conference group pic – Joy is in the unpatterned red dress.
Department of Chemistry PhD student Christiana Kitsiou, 24, was one of five early career scientists from the University of York chosen to attend Parliament to present their science to politicians and a panel of expert judges as part of SET for Britain. Christiana is researching the design of novel chemical reactions to produce libraries of valuable compounds for use in the discovery of new medicines.

The annual competition, which is open to early stage or early career researchers, is run by the Parliamentary and Scientific Committee in collaboration with the Council for the Mathematical Sciences, the Institute of Physics, the Physiological Society, the Royal Academy of Engineering, the Royal Society of Chemistry, the Society of Biology and the Society of Chemical Industry.

Andrew Miller MP, Chair of the Parliamentary and Scientific Committee, said, “This annual competition is an important date in the parliamentary calendar because it gives MPs an opportunity to speak to a wide range of the country’s best young researchers.

“These early career engineers, mathematicians and scientists are the architects of our future and SET for Britain is politicians’ best opportunity to meet them and understand their work.”

The national event receives financial support from BP, the Clay Mathematics Institute, Essar, INEOS, Warwick Manufacturing Group (WMG), Germaine Seed Technology, Boeing, the Bank of England and the Institute of Biomedical Science.
Chief Glassblower Brian Smith Retires

As most of you will know, Brian Smith retired from his post as Chief Scientific Glassblower early in March. Those of you who contributed to his collection, I thought you may like to know that we bought him:

* A whisky decanter and matching liqueur glasses.
* A bottle of Cragganmore whisky
* A bottle of Port
* Green and Black chocolates
* A 3 month subscription to a Spice/curry club – where they send you a box of spices at the end of the month, along with recipe cards.

Brian’s last day, by his own request was a very small affair of a pub lunch which started out all very calm and civilized, until Brian lost one of the crowns from his front teeth, and then it was down hill from there really - especially once the whisky was flowing!! All in all though it was a nice afternoon and pretty much how I think Brian wanted his retirement ‘do’ to be.

So now that Brian has retired, this leaves myself as the only glassblower, and to help with this, I am going to implement a few changes which I think will help the workshop run a little smoother.

Currently the workshop is being treated to a good old spring clean – so apologies to anyone who comes down and finds a mild state of chaos – it is temporary.

I am starting to use our notice board, which is situated just outside the workshop, to the left of the door. A more ‘low tech’ version of Chris R’s monitor, you will find here details of any upcoming days where the workshop will be closed due to holidays/ days off etc. I will aim to put dates up as soon as they are booked to give as much notice as possible. I will also put up details of usual opening hours, and some general info about the workshop etc.

I am also going to produce a job sheet (similar to what mechanical workshops have started using) for recording job details, email, charge code etc. These should be available for use soon. Eventually there will also be a collection and drop off point set up too, so watch this space!

The Final and major change is that on Thursdays from 3 April, ALL 3 workshops will be closed, except to urgent matters / emergencies.

- Abby Storey
First Meeting in Green Chemistry Industrial Engagement Facility

The Green Chemistry Centre of Excellence (GCCE) are currently in the process of moving into their new home in F-block, which is part funded by the ERDF. The building contains an industrial engagement facility and on the 17/18 March, this hosted a meeting of the partners on an FP7 project (CyclicCO2R) which involves Professor Michael North. Representatives of companies including Feycon, Evonic, Sintef and TNO were present as was an EU project advisor and delegates from the RWTH in Aachen.

The visitors were very impressed by the quality of the facilities available at York. Many of the research facilities are not commonly found in UK Universities and it is hoped that by highlighting their presence in close proximity in York will result in the GCCE being invited to be a partner in more EU and industrially funded projects.

The meeting was judged a success by all the participants. In addition to a day of presentations and discussions directly relevant to the CyclicCO2R project, Professor North and his group took the opportunity to provide tours of the new research facilities for green chemistry, the new teaching laboratory and the Biorenewables Development Centre. Some of the delegates are pictured above, examining water powered clocks provided by the project leader as a reward for meeting the first deliverable deadline. Now green chemists can tell the time in a green way!
ChemSoc Presentation Practise

On Wednesday 26th February, ChemSoc, in collaboration with Dr Nick Wood, masterminded the inaugural ‘ChemSoc Presentation Practise’ event. The informal session, hosted by PhD student Kate Horner, provided undergraduate students with an opportunity to present a short talk on a subject of their choice in a relaxed and supportive environment. Each speaker then received structured feedback on their style from their peers in the audience. Some of the entertaining topics covered included why everybody should take up knitting, the perils of playing the euphonium and the active ingredients of magic mushrooms.

Dr Wood, along with Dr Seishi Shimizu, joined in the supportive spirit of the occasion by presenting talks on the most epic match of board game ‘Go’ ever seen and Homeric chanting (you can decide who did which!). The event concluded with PhD student Stephen Bromfield offering some words of advice for giving presentations, including a demonstration explaining how thinking of sweets while talking can really help! Building on the success of this session, the next ‘ChemSoc Presentation Practise’ is expected to run in Summer term.

Goodbye Owain

Owain Samuel is leaving the Department on Friday 4th April to take up a job as a fitter on the North Yorkshire Moors Railway at Grosmont. Although he will be missed, I am sure we all wish him the very best for the future. There is a card for Owain in A133 as well as a collection for him.

- Simon Breeden

Photo: Some of the speakers from the inaugural ‘ChemSoc Presentation Practise’
The Bruker Poster Competition took place this year on 20 March, and saw 33 of our third year PhD students presenting their poster.

The Competition requires participants to display a poster about their research which is scored by a panel of judges who look at presentation, scientific content, and student discussion. The judging panel consists of member of academic staff and PDRAs as well our guests this year, Professor John Seddon from Imperial College London and Dr Rob Hill from Bruker.

The standard of the posters was very high, with many judges commenting on the excellent quality of the work on display, and how nice it was to speak to people who are so enthusiastic about their work. This inevitably meant that deciding on the winners was difficult but four well deserving winners were chosen.

Winners were announced at a departmental seminar in the afternoon, followed by a talk from Professor Seddon entitled X-ray Studies of Hydrostatic Pressure effects on the Structure and Stability of Lipid Membranes and Lyotropic Mesophases

Many congratulations to our four winners:

Thomas Ronson (IJSF/RJKT)
Mark Sims (JNM/JWG)
Rachel Smith (JETO/ETB/Ol Craig)
Vargini Thangavadivale (RNP)

Thanks go to Bruker for their sponsorship of the event, all those members of staff on the judging panel, and all the students for taking part.
Green Chemistry Outreach Days

The Green Chemistry Centre of Excellence had a busy week of outreach activities in the Department of Chemistry in March, running two successful events in the lab for school children. The first, a visit from lower sixth form students from Queen Margaret’s School in Escrick, took place on Monday 17\textsuperscript{th} March. The second was part of the University of York’s Science Trail on Friday 21\textsuperscript{st} March. On both these days, we introduced the principles of green chemistry through hands-on experiments, such as making plastic from potato starch. The colourful plastic creations can be seen in the photo below. The students learned about the importance of getting value from food waste, and in return we were given an informative lesson on quantum mechanics from a particularly bright boy! Overall, everyone found the outreach days very enjoyable and learned a lot.

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.
Sport Relief

There are now three Bird Boxes located in the trees in Quadrangle. The lower one is for a robin to nest in. Thanks to Gordon Eastman and his team for putting these up.

The blossom on the one of the memorial trees is looking stunning at the moment (see photo).

Chemical InterActions Smartphone Quiz

Date: Thursday 15 May
Time: 6.30pm—8.30pm
Location: C/A122

Email chemical-interactions-group@york.ac.uk to register a team of 4-6 people. One smartphone or laptop per team required; Bring your own drinks and nibbles!

Sport Relief

Thank you to everyone who contributed towards the Cake Sale last week in aid of Sport Relief.

Chemical InterActions organised the event and raised a grand total of £218.32

Thanks to everyone who baked and or bought cakes.
Thinking outside the module box

Wednesday 18 June 2014
The Exhibition Centre, Physics/Electronics Building, Heslington west campus

Registration now open
Register at: www.york.ac.uk/staff/teaching/sharing/sharing-practice/conference

Keynote speakers:
Professor Koen Lamberts, Vice-Chancellor, University of York
Dr Mitch Waterman, University of Leeds

The Conference is free and open to all staff and students.
If you have a query about any aspect of the event, please contact: Janet Barton (janet.barton@york.ac.uk)