

# Chemistry Update

Newsletter 280, 19<sup>th</sup> December 2016

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## Calendar of Events

### UCAS Days

Dates: 10, 17, 23 & 26 Jan

Time: 12.30pm—4pm



### Research Seminar

Speaker: Prof Jonathan Clayden,  
University of Bristol

Date: Wednesday 11 January

Time: 1pm—2pm

Location: A122

### Research Seminar

Speaker: Dr Graham Newton,  
University of Nottingham

Date: Wednesday 18 January

Time: 1pm—2pm

Location: B101

### Green / Physical Chemistry / YSBL Seminar

Speaker: Dr João A.P. Coutinho

Date: Tuesday 24 January

Time: 2pm—3pm

Location: F106

Date of Next Issue:  
27<sup>th</sup> January 2017

# Green Chemistry Features in Autumn Statement

**The Green Chemistry Centre of Excellence (GCCE) will provide vital research-enabled evidence in shaping the bioeconomy of the North of England, announced in last month's Autumn Statement.**



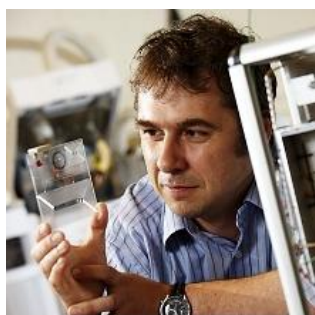
The University, chosen by the Department for Business, Energy and Industrial Strategy (BEIS), will lead a consortium of universities, research establishments, Local Enterprise Partnerships and industry to carry out a comprehensive Science and Innovation (SIA) audit of the bioeconomy of the North of England.

The Green Chemistry Centre of Excellence is internationally-leading in conversion of low value or underutilised renewable resources in to sustainable chemicals, materials and fuels using green chemical technologies within the context of a biobased circular economy. The Centre is well-placed to provide key evidence through its fundamental research and strong industrial engagement with local and global businesses.

Director and Deputy Director of the Green Chemistry Centre of Excellence, Professor James Clark and Dr Avtar Matharu said "We are delighted to hear this news which also complements our activities within the Biorenewables Development Centre and Biovale. This news also coincides with our latest venture, RenewChem, which promotes development of sustainable chemical manufacturing using renewable feedstocks."

## Cutting Air Pollution

**How can the UK government meet its legal air pollution targets?**



Professor Alastair Lewis has written an article for *The Conversation* addressing how the government is obliged to cut high levels of harmful gases to reduce the number of deaths in the UK. He touches upon ways that the government can clean up city air and short-term strategies that can be implemented immediately to meet targets in 2020.

Read the full article at <https://theconversation.com/how-can-the-uk-government-meet-its-legal-air-pollution-targets-69577>.

## Clarke Group News

Congratulations to Josh Smith and Nadiah Mad Nasir, both of who successfully defended their PhD theses at viva examinations on 22 November. Josh is moving on to become a patent lawyer and Nadiah is heading back to Malaysia for a career in academia.

The joint team of Clarke, Smith and friends (The Homogeniuses) won the RSC Top of the Firm pub quiz for the second successive year and by an increased margin of 37 points! The teams demonstrated a good knowledge of showtunes and words hidden in the word "Constantine", but crashed and burned on building a tower of dominos.



Photo: Josh and Nadiah with the Clarke Group and examiners Prof Peter O'Brien and Prof Adrian Dobbs (University of Greenwich).

## New Starters

**Zoe Bromage**, Finance Assistant, working with Mike Clark

Room: DS110 (temporary office); Extension: 2515; Email: [zoe.bromage@york.ac.uk](mailto:zoe.bromage@york.ac.uk)

**Dr Hon Eong Ho**, PDRA with RJKT

Room: D216; Extension: 2596; Email: [honeong.ho@york.ac.uk](mailto:honeong.ho@york.ac.uk)



## Suggestion Box



Reminder: There is an online anonymous suggestion box for staff under the Equality and Diversity section of the intranet: <http://www.york.ac.uk/chemistry/internal/> and a physical suggestion box located outside Room K167 for YSBL staff. Suggestions from staff are most welcome. All suggestions are discussed by the appropriate departmental committee.

## Chemistry Staff Recognised at Professional@York Conference

The [Professional@York Conference](#) for the University's support staff took place on 8 December, at which Dr Adrian Whitwood and YSBL technician Louise Haigh were short-listed as 'Unsung Heroes'.

Adrian's ability to handle a wealth of roles simultaneously has ensured Chemistry, Biochemistry and Natural sciences are able to function to top form. He also handles a full time DCO role and management of student lists and exam marking.

During 2016 Louise has been critical to maintaining research support in YSBL. During this period the other YSBL support staff were on leave and Louise stepped up to provide a smooth running lab. Everyone in the YSBL appreciates her support and these efforts were above and beyond what was expected of her.

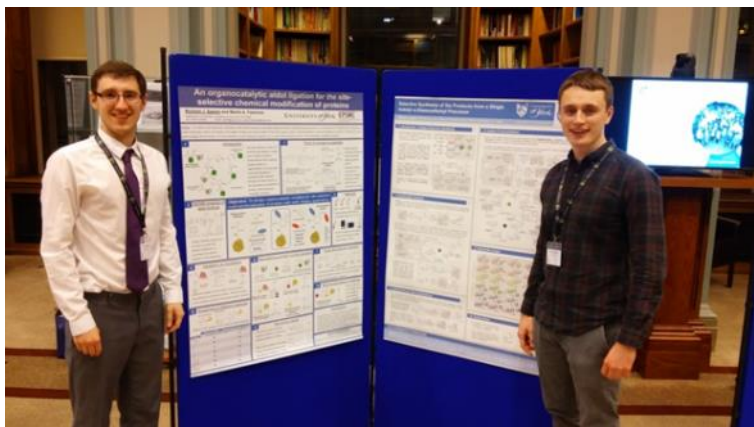
So congratulations to Louise and Adrian for their well-deserved shortlisting.

Thank you to everyone who nominated a member of the Chemistry support team for an award.

## Organic Division Poster Symposium

**Royal Society of Chemistry, Burlington House, Piccadilly, London, 5 December 2016**

Richard Spears (supervised by Dr Martin Fascione) and Michael James (supervised by Professors Richard Taylor and Peter O'Brien) were 2 of the 40 delegates selected from 116 applicants to present their work at the prestigious Organic Division Poster Symposium. Richard presented his work on "An organocatalytic aldol ligation for the site-selective, chemical modification of proteins" and Michael on the "Selective synthesis of six products from a single indolyl  $\alpha$ -diazocarbonyl precursor", which both generated an excellent level of discussion. Unfortunately, neither student was awarded a formal prize at the Symposium; however, Richard Taylor (who also attended) insisted they were both still winners in his eyes!



The students and their posters: Richard Spears (left) and Michael James (right).



# Professor Richard Taylor's Travels



In October and November, Professor Richard Taylor was busy travelling the world (from Abingdon to Sichuan) giving lectures around the general topic of "From Natural Products to Organic Diversity: Dearomatisation and Spirocycle Synthesis".

In October, visits to the University of Bath and Evotec Drug Discovery (Abingdon) concentrated on medicinal chemistry / synthetic methodology. Then in November,

a week-long lecture tour of China featured seminars on more academic aspects of the topic in Peking University (Beijing), Sichuan University (Chengdu) and, finally, the Institute of Organic Chemistry in Shanghai. In China, Richard also led sessions on preparing and submitting scientific papers for publication in international journals. These academic events were interspersed with historical tours (the forbidden city in Beijing, the old town in Chengdu and the Bund in Shanghai) and culinary delights (Peking duck, Sichuan spicy dishes and Shanghai hairy crabs).



## Smith Group News

In October, as part of his research leave, Professor Dave Smith was on a lecture tour of Eastern USA, where he gave his talk 'Hard Facts About Soft Materials - Multicomponent Self-Assembled Gels with High-Tech Applications' at Massachusetts Institute of Technology (MIT), City University New York (CUNY), Georgetown University and University of Maryland. Dave also visited Boston University to spend time with his collaborator Professor Mark Grinstaff. In addition to seeing lots of outstanding science during his visits, and spending some relaxing days working on research proposals in Boston and New York Public Libraries, Dave also had lots of time for discussions about the impossibility of Donald Trump winning the US election - clearly a career as a political pundit does not beckon. After the work was complete, Dave took the opportunity to do some touring with his husband and their three-year-old son - even coming face-to-face with a wild black bear while walking the trails in Shenandoah National Park.



After returning to York, Dave has been heavily involved in outreach lectures, and has delivered his schools lecture, 'From Breaking Bad to Making Good - The Chemistry of Drugs' to over 1000 A' level students in Manchester and Sheffield. This lecture explores the impact of chemistry in medicine and the way drugs work in the human body. The lecture is told through the contextualised stories of a number of different drugs - both medicinal and illicit - and involves demonstrations and audience participation (not including the illicit drugs).

## Arrival of Baby Elliott



Congratulations to Lauren Hunt and David Shaw on the birth of their baby boy Elliott David Shaw, born at 8:39am on Friday 9 December, weighing 7lbs exactly.

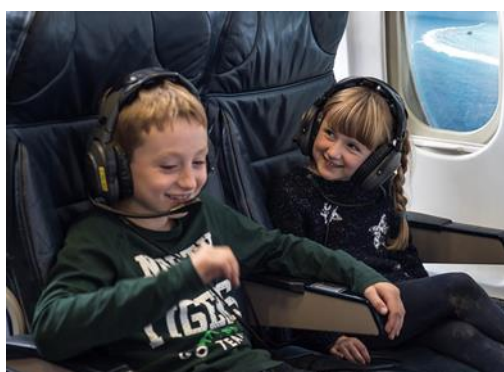
Lauren has said "We are all doing really well and so in love with our baby boy".

# NERC Into the Blue Science Exhibition

Scientists from the Wolfson Atmospheric Chemistry Laboratories (WACL) took part in a large NERC public engagement showcase at The Runway Visitor Park at Manchester Airport during October half term. Forty exhibits staffed by NERC scientists showed visitors how environmental science affects their lives. Six members of staff and nine PhD students from WACL attended the event and ran two exhibition stands, gave public lectures and helped out with tours of the FAAM UK atmospheric research aircraft.

The WACL exhibit looked to engage visitors with the atmospheric chemistry research done here at York through hands-on activities demonstrating how we separate chemicals in the air so we can measure them and why sunlight is important for atmospheric chemistry. Visitors could also explore an interactive map giving information about where WACL scientists travel and why, and 3D visualisations of how air pollution travels around the globe. Finally visitors were asked where in the world they would go to investigate air pollution issues and why. Interestingly China came up numerous times and the exhibitors were happy to tell visitors that WACL had scientists on their way to Beijing for a field campaign starting just a couple of weeks later. The event was well attended with approximately 5250 visitors over the 5 days including both members of the public and stakeholders. Feedback was also very positive with comments like:

*"it's been lovely to see how engaged [my daughter's] been here today - she's got really into all sorts of activities. I've decided to take her to other kinds of science events to encourage her interest." And "I loved that it was so hands-on, something for the children to do on every stand, and even stuff for adults to do! Very interesting in a fun way."*



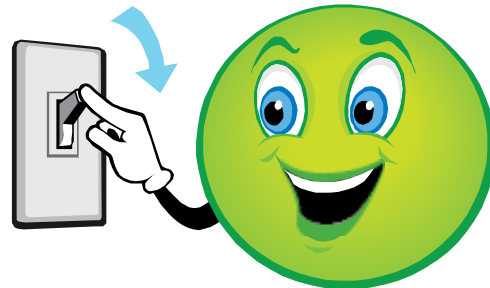


# Green Impact

## Please Help Save Energy Over Christmas

The Chemistry Environmental Performance Group would like to wish everyone a happy and safe holiday.

Over the Christmas break, please can you ensure the following is turned off (preferably turn off at the wall):



- Computers
- Printers
- Monitors (especially important as the monitor uses up to 50% of energy - even when it is on 'standby' i.e. an orange light).
- Lights
- Photocopiers
- Any equipment that does not need to be kept running over this period.

Please turn down the heating to the minimum settings where possible (radiators, thermostat controls and thermostatic radiator controls). Please also turn off any air conditioning as well.

You can access your PC and network files remotely even when computers are turned off, please see <https://www.york.ac.uk/it-services/work-off-campus/> and follow the links under 'Working off Campus'. If you don't want to install software on your device, you can also log in to the virtual private network and then log in to Planon which allows you to access most webpages from home or elsewhere.

## Save Your Christmas Stamps!

Used stamps are collected and given to the Royal National Institute of Blind People (RNIB). The charity sells the stamps to generate revenue for their work.

Any and all stamps welcome!

Find a collection envelope located at **Chemistry reception**.

For help and advice on any green issues please contact [chem-epg@york.ac.uk](mailto:chem-epg@york.ac.uk).





# Christmas Fundraising – Christmas Cards

This year, the Chemistry Admin team have decided not to send Christmas cards to friends and colleagues in the Department but instead give any money they would have spent on cards to charity with the donations being split between the [Toilet Twinning](#) project and [York Against Cancer](#). If you would like to join them in this activity, collection boxes can be found in C/A121, B/K127 and CHM/005.

Donate to charity – see above and send free Christmas e-cards instead!

For example see the following websites:

FREE! 123 Greetings <http://www.123greetings.com/events/>

FREE! <http://ecards.co.uk/>

PAID... <http://www.jacquelawson.com/>

PAID... <https://www.hallmarkecards.com/>



## Tips to Save Energy over Christmas

- ◇ Heating - try not to turn the heating up too much - wrap up in a jumper/blanket instead and wear layers.
- ◇ Recycling - recycle as much as you can - you might even be able to recycle wrapping paper (check on your Council's website - may need to remove sellotape) or use up old Christmas cards for scrap paper.
- ◇ Food waste - try not to cook more than you need or try to use up left over food the next day or store in the fridge or freezer.
- ◇ Water - try to wash up rather than using the dishwasher (and turn the tap off between each use). Only boil as much water as you need in the kettle.
- ◇ Oven - don't open the oven door if possible as this wastes energy. Cook more things at the same time by using smaller oven trays, for instance.
- ◇ Fridge - don't open the fridge too often (leave the door open for a longer period of time while you take out the items you need is more efficient than opening and closing the door several times).
- ◇ Driving – try to reduce the number of trips you have to make, for example try to combine outings, go shopping fewer times. Also, in the cold weather, try not to keep your car running when you start it up in the morning (it is more efficient to go straight away – de-ice your car before you turn the engine on).



# Independent Fellowships Open Day – 24 March 2017



The Department of Chemistry will be holding an Open Day for researchers interested in applying for independent fellowships to be based in York. Potential applicants are invited to come and visit the Department on Friday 24 March 2017 to meet fellow scientists, view our facilities and learn more about the Department and its work. Both external and internal candidates are encouraged to attend.

The outline schedule is as follows:

- |             |  |
|-------------|--|
| 10.00-10.30 | Registration and coffee  |
| 10.30-12.00 | Introduction to the Department <ul style="list-style-type: none"><li>• Department research themes and strategy</li><li>• Equality and diversity</li><li>• Research support</li></ul> |
| 12.00-14.00 | Tours of the Department, lunch, and networking   |
| 14.00-15.30 | Current and former research fellows talk about their work and their career.  |
| 15.30-16.00 | Tea  |
| 16.00-16.45 | Panel Q&A session  |
| 16.45-17.30 | Refreshments and networking  |

To register or for more information on independent fellowship opportunities in Chemistry at York please see our Fellowships webpage: <http://www.york.ac.uk/chemistry/research/fellowships/>

Please direct any enquiries to [chem-research@york.ac.uk](mailto:chem-research@york.ac.uk)

Please circulate this opportunity as widely as possible.

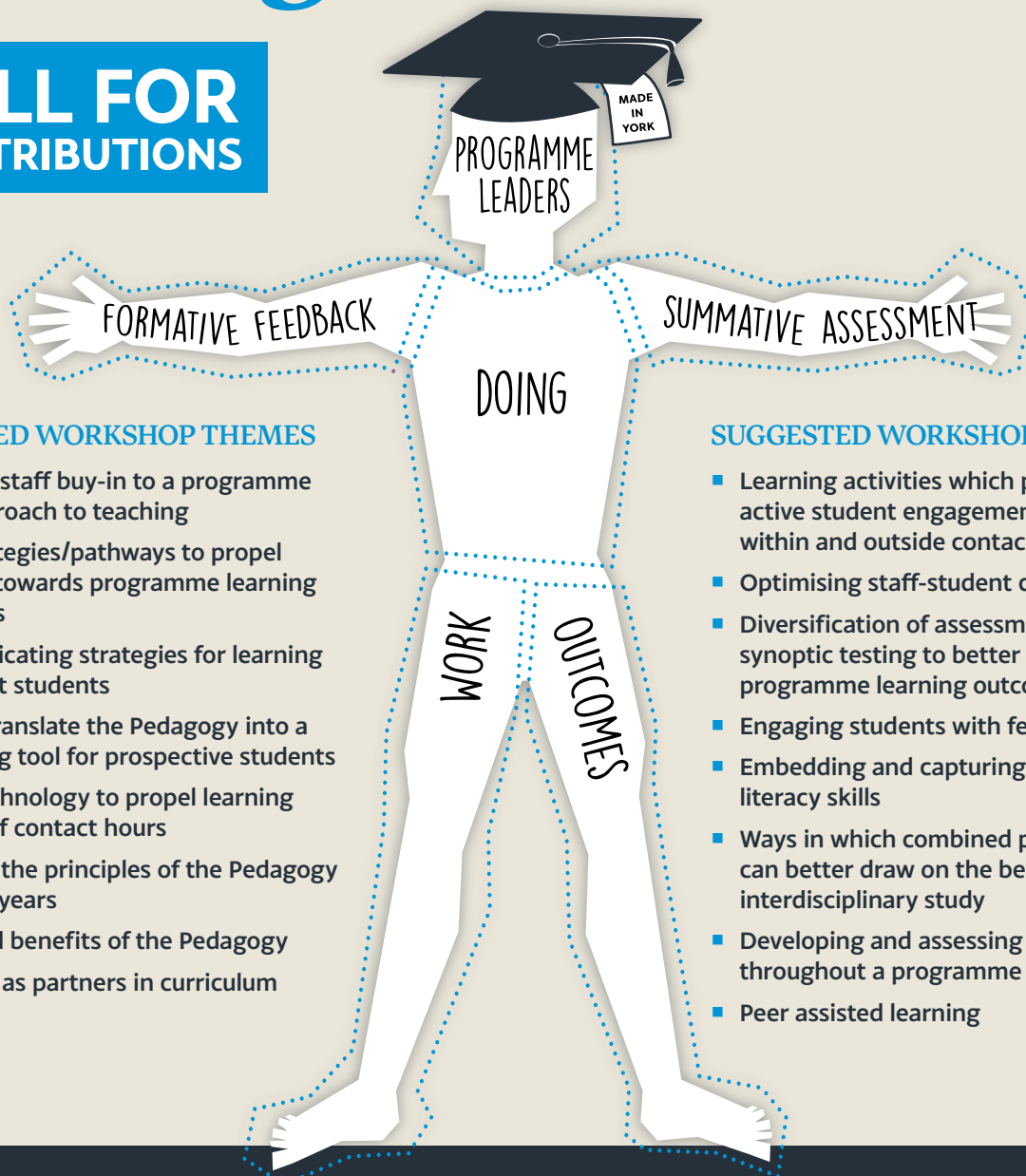


# UNIVERSITY OF YORK LEARNING AND TEACHING CONFERENCE

**2017**  
TUESDAY 20 JUNE

## The York Pedagogy – making it work

**CALL FOR  
CONTRIBUTIONS**



### SUGGESTED WORKSHOP THEMES

- Securing staff buy-in to a programme level approach to teaching
- Best strategies/pathways to propel learning towards programme learning outcomes
- Communicating strategies for learning to current students
- How to translate the Pedagogy into a marketing tool for prospective students
- Using technology to propel learning outside of contact hours
- Applying the principles of the Pedagogy in future years
- Perceived benefits of the Pedagogy
- Students as partners in curriculum design

### SUGGESTED WORKSHOP THEMES

- Learning activities which promote active student engagement both within and outside contact hours
- Optimising staff-student contact time
- Diversification of assessment and synoptic testing to better align with programme learning outcomes
- Engaging students with feedback
- Embedding and capturing digital literacy skills
- Ways in which combined programmes can better draw on the benefits of interdisciplinary study
- Developing and assessing group work throughout a programme
- Peer assisted learning

### CALL FOR CONTRIBUTIONS

We are inviting colleagues to contribute workshops and poster presentations.

Deadlines for submission is Wednesday 15 February 2017. Further information can be found at: [bit.ly/2es0a2R](http://bit.ly/2es0a2R)