Inside this Issue

2019 Process Chemistry Award
ACU Blue Charter fellowship success
Chemistry staff feature in Professional@York Awards ceremony
New starters
Salters’ Graduate Award success
Tribute to Green Chemistry Alumnus Professor Egid Mubofu
Dr Glenn Hurst gives invited talk at Future Teacher Conference
LGBT+ STEMinar 2019
Hidden Stories of LGBT+ Scientists | Talk
Seminar programme
The Vikings are coming!

Calendar of Events

UCAS Post-Offer Visits
Dates: 29 & 31 January; 7, 12, 18 & 26 February
Time: 12pm—4pm

Physical Seminar
Speaker: Prof Helen Fielding, University College London
Date: Wednesday 30 January
Time: 1pm—2pm
Location: C/B101

Organic Seminar
Speaker: Dr Igor Alabugin, Florida State University
Date: Wednesday 30 January
Time: 3pm—4pm
Location: C/A101

Inorganic Seminar
Speaker: Dr Kylie Vincent, University of Oxford
Date: Wednesday 13 February
Time: 1pm—2pm
Location: C/B101

UCAS Pre-Offer Visit
Dates: 14 February
Time: 12pm—4pm

Departmental Seminar
Speaker: Prof Zoe Pikramenou, University of Birmingham
Date: Wednesday 20 February
Time: 1pm—2pm
Location: C/A101

Cryo-EM Scientific Meeting
Date: Wednesday 20 February
Time: 2.30pm—5pm
Location: Williamson Rooms, Biology H block

Hidden Stories of LGBT+ Scientists
Speaker: Professor David Smith
Date: Wednesday 13 February
Time: 1pm—2pm
Location: C/A122

Hidden Stories of LGBT+ Scientists
Speaker: Prof Hon Lam, University of Nottingham; Dr Robert Phipps, University of Cambridge
Date: Wednesday 27 February
Time: 1pm—3pm
Location: C/B101
Professor Ian Fairlamb has been awarded the 2019 AstraZeneca, GlaxoSmithKline, Pfizer and Syngenta Prize for Process Chemistry Research. This annual prize is awarded to a UK-based academic whose research is relevant to process chemists and engineers, and has the potential to be applied to large-scale manufacturing. The award was established to encourage the development of new chemical reactions and technologies that solve problems in industrial process chemistry.

The award will be presented to Professor Fairlamb at the forthcoming SCI Process Development Symposium being held in Cambridge on 27—29 March 2019. He will receive a trophy and a cheque to support further research. It is the 14th time this award has been made, and the 2nd time that a York academic has won the award (the previous winner was Professor Peter O’Brien in 2017).

Professor Ian Fairlamb is receiving the award in recognition of his expertise in transition metal catalysis and the mechanistic theory underpinning these industrially-valuable processes. In particular, he is interested in developing deeper understanding of a variety of metal-catalysed reactions and applying his findings to improve widely-used cross-coupling methodologies. This has included the development of new ligands and catalysts, as well as studying the role of palladium nanoparticles (PdNPs) in Suzuki-Miyaura, cyanation and C-H functionalisation reactions. Several key breakthroughs from the Fairlamb research group have been influential in industrial process chemistry.

By recognising the importance of water in palladium-catalysed aryl cyanation, research from the Fairlamb group has allowed such reactions to be performed with as little as 7 parts per million of palladium (React. Chem. Eng. 2019, 4, 122-130). This methodology is currently being exploited in the agrochemical industry by Bayer AG.

The unexpected formation of nitrite-containing palladium complexes on the reaction of ligands with commercial sources of palladium acetate reported by Fairlamb highlighted the importance of knowing the purity and precise form of this reagent in all processes destined for large-scale and/or long-term manufacture (Chem. Sci. 2012, 3, 1656-1661). A perspective on the industrial importance of this influential work was written by chemists at Johnson Matthey (Chem. Eur. J. 2016, 22, 7686-7695).
ACU Blue Charter fellowship success

Green Chemistry first year PhD student Parul Johar has been awarded an ACU Blue Charter fellowship of £10,000.

Parul is one of a cohort of 35 successful applicants to be awarded the prestigious ACU (Association of Commonwealth Universities) Blue Charter fellowship. The programme provides funding for talented researchers to travel from an ACU member university to a host institution in another country, for research work themed around addressing the critical global issue of marine plastics, which are drastically affecting the health of our oceans and marine life.

Parul is carrying out a PhD in the Green Chemistry Centre of Excellence (GCCE), Department of Chemistry, University of York, under the supervision of Professor James Clark, Dr Avtar Matharu and Dr Rob McElroy. She is investigating the use of certain types of plants with the ability to capture metals as feedstocks for making metal-based catalysts that can be used in important industrial chemical processes.

The fellowship awards Parul a grant of £10,000 to fund a research visit to the University of Melbourne, Australia, from January 2019 to March 2019, where she will be collaborating with Professor Amanda Ellis.

The Commonwealth Blue Charter is an agreement by all 53 Commonwealth countries to actively co-operate to solve ocean-related problems and meet commitments for sustainable ocean development. The Blue Charter fellowships will support world-class research and innovation in marine plastics, and help fulfil the objectives of the Commonwealth Marine Plastics Research and Innovation Framework.

Reflecting on her fellowship success, Parul said: “I am honoured to be one of the recipients of the ACU Blue Charter Fellowship. My research project will cover the broad areas of sustainable design, plastics waste management and Green Chemistry”.

Also reflecting her talent, Parul was awarded a Wild Platinum Scholarship earlier in the year to fund her PhD studies. This Scholarship Fund was established by Chemistry alumnus, Dr Tony Wild, to fund Chemistry research students at York.

Learning and Teaching Conference 2019: Call for submissions

The annual Learning and Teaching Conference will take place this year on Friday 21 June, and organisers would like to invite colleagues to contribute through workshops or lightning talks on the conference theme, or posters on any aspect of teaching and learning. The deadline for submissions is Monday 18 February. Please complete the Call for Contributions form or find out more.
The Professional@York awards have been developed by the University of York to celebrate, acknowledge and reward the achievements of individuals and teams working in support roles across the University. The Awards are held every year and are open to all support staff. There are a number of different categories that individuals and teams can be nominated for, which are then reviewed by a panel of judges.

On the afternoon of 13 December 2018, professional staff from across the University met in Central Hall to hear the outcome of this year’s awards and listen to some short presentations, highlighting the work done by support staff at the University. The afternoon ended with festive nibbles and a chance to network with colleagues.

A number of Chemistry support staff were nominated and two teams won their categories (see below), congratulations to all involved.

Health, Wellbeing and Resilience Project: Chemistry Mental Health Support Team - Gregg Addicott, Liza Binnington, Helen Burrell, Helen Coombs, Emma Dux, Leonie Jones, Moray Stark, Sharon Stewart and Adrian Whitwood

Outstanding Support to Teaching: Chemistry Undergraduate Admissions Team - Lisa Mayer, Katrina Sayer and Nick Abbott
The other nominations were:

**Unsung Hero**: Helen Coombs and Jing Wood

**Outstanding Support to Research and Impact**: Andy Goddard

**Outstanding Project of the Year**:
- **Technician Commitment Delivery Project Team**: Simon Breeden, Lucy Hudson (Biology) and Abby Mortimer
- **Chemistry Google Working Group**: Gregg Addicott, Matthew Badham, Katy Brooke, Jo Eastwood, Lisa Mayer, Sophie Palmer and Denise Woodhouse
- **The TechYork Committee**: From Chemistry - Liza Binnington, Helen Burrell, Graeme McAllister
- **Online Timetable Project Team**: Adrian Whitwood and academic/support staff from other departments

Matt Thompson from Estates and Campus Services won the Outstanding Project of the Year category for delivering the Chemistry Helium Recycling system; he was jointly nominated by Chemistry and Estates.

Details of all the award winners and the projects can be found on [this webpage](http://www.example.com).

---

**New starters**

**Dr Alyssa-Jennifer Avestro**, Royal Society Dorothy Hodgkin Fellow
Room: C/E204; Ext: 8962; Email: alyssa-jennifer.aviestro@york.ac.uk

**Dr Suranjana Bose**, Green Chemistry Research Technician with Paul Elliott
Room: C/F120; Ext: 4549; Email: suranjana.bose@york.ac.uk

**Dr Richard Gammons**, Green Chemistry Research Technician with Dr Hannah Briers
Room: C/F120; Ext: 4549; Email: richard.gammons@york.ac.uk

**Kate Smith**, PDRA Air Pollution Science with Prof Ally Lewis
Room: C/G116; Ext: 4754; Email: k.smith@york.ac.uk

**Will Duckworth**, Teaching Laboratories Demonstrator with Dr Nick Wood
Room: C/B103; Ext: 5872; Email: will.duckworth@york.ac.uk

**Caroline Casey**, Programme Evaluator (CIEC) with Dr Maria Turkenburg
Room: C/B013; Ext: 2562; Email: caroline.casey@york.ac.uk
Salters’ Graduate Award success

Alice McEllin, first-year PhD student in the Department of Chemistry, was one of five recipients of a Salters’ Graduate Award for 2018. This national competition, run annually, seeks to find the best five graduating students in Chemistry from across the UK. The award was announced in the summer.

Salters’ rubric reads: “The Awards were established to encourage able students of chemistry and chemical engineering who show the potential to occupy leading positions in public life, either by employment in the chemical or related industries, or more generally in employment that supports the industrial life of the UK.”

Soapbox Science in York this summer - Call for speakers

Soapbox Science is a novel public outreach platform for promoting women scientists and the science they do. After the success of last year’s event, there will be a Soapbox Science event in York city centre again this June. Women scientists at all career stages from PhD to Professor are welcome to apply, and support and training are provided for speakers - and a soapbox of course! Deadline for online applications: 1 March 2019. Find out more about taking part and apply here. For more information please contact: andrea.harper@york.ac.uk.
Tribute to Green Chemistry Alumnus Professor Egid Mubofu

Professor Egid Mubofu, who obtained his PhD in the Green Chemistry Group at York, and was recently appointed Vice Chancellor at the University of Dodoma in Tanzania, has sadly died at the age of 53.

Egid joined the University of York in 1997 and received his PhD in Chemistry in 2001, supervised by Professor James Clark and Dr Duncan Macquarrie.

Professor James Clark expressed his condolences: “It is with deep regret that we announce the death of our much admired colleague and friend, Professor Egid Mubofu, at the young age of 53. Egid was a PhD student of mine many years ago and thereafter had a stellar and distinguished career including senior roles in the University of Dar es Salaam, the Director General of the Tanzania Bureau of Standards and most recently the Vice Chancellor of the University of Dodoma. Egid was a great ambassador for Green Chemistry in Africa and globally. He was also highly intelligent, charming and modest and he will be very much missed. I am sure that you will join me in sending our deepest condolences to his family... he will be evergreen.”

Dr Glenn Hurst gives invited talk at Future Teacher Conference

On 9 January, Dr Glenn Hurst was invited to present his work on innovative use of social media in higher education at the Future Teacher 3.0 Conference in the Piazza Building at the University of York. This national conference celebrates technology-enhanced learning with particular highlights from the day being flipped learning, inclusivity in the classroom and assessment design.
LGBT+ STEMinar 2019

Written by Alex Palmer, Year 4 MChem student

On Friday 11 January, four members of the Department of Chemistry (a mix of staff and students) attended the fourth annual LGBT+ STEMinar at the new Institute of Physics building in London. The event brings together LGBT+ scientists from across disciplines to talk about their work, connect with others, and discuss some of the challenges of being out in STEM.

The opening keynote speaker this year was Dr Izzy Jayasinghe, who also spoke last year in York. Izzy spoke about finding solace in STEM as an LGBT+ person, the importance of role models, and her work on optically resolving calcium ion channels in cardiac muscle. She also discussed the importance of not underestimating people’s capacity for understanding science, but to give them the tools and to call out opinion masquerading as scientific debate.

There was a huge diversity in subjects presented, from Greenland glaciers and island finches to quantum computers and machine learning. Enthusiastic discussion continued on Twitter, with #LGBTSTEMinar19 trending in the UK during the conference.

During the panel discussion, attendees pushed for a more inclusive STEMinar going forward: advocating for awareness of intersectionality, more speakers who were people of colour, and asking what could be done to make the STEMinar more diverse. In the closing keynote, Professor Peter Coles looked back on his own career and the progress made in astrophysics and in LGBT+ rights. He highlighted this same need to keep pushing - every scientific advance brings new questions, and every advance in LGBT+ rights brings new challenges.

Niamh Kavanagh, one of the speakers, summed up in a tweet what makes the STEMinar special: “When people don’t feel like they have to hide... their true passion can shine through”.

The steering group for the LGBT+ STEMinar (of which Dr Derek Wann is a member) announced at the meeting that the in 2020 the event will be held at the University of Birmingham and in 2021 it will go to Oxford. To learn more about the conference and read about the work of LGBT+ people in STEM, please visit the LGBT STEM blog.

- Alex Palmer, Year 4 MChem student
Hidden Stories of LGBT+ Scientists | Talk

Speaker: Professor David Smith, Department of Chemistry, University of York
Date: Wednesday 13 February
Time: 13:00 – 14:00
Location: C/A/122, Department of Chemistry

Diverse scientists are ideally placed to use their unique experiences to ‘imagine the impossible’ and solve challenging problems. It is perhaps surprising that LGBT+ scientists are often invisible. This lecture by David K. Smith, Department of Chemistry, will explore difficulties faced by LGBT+ scientists, highlight their ongoing work, and uncover hidden stories. We will discuss cutting-edge science and the politics of identity, to show that diversity is a strength.

Organised by: University of York
Tickets: Free, but register by emailing equality@york.ac.uk
More information: Chris Brunt (01904 324680 | equality@york.ac.uk) | york.ac.uk/admin/oe/index.htm

Accessibility: Baby changing, Gender-neutral toilets, Wheelchair access
Below you’ll find the current seminar list through to the summer. The schedule includes RSC award and prize winners, other Departmental seminars, inorganic, organic and physical seminars. I’m sure you’ll agree we have a great programme coming up, from a diverse group of speakers, which will be of interest across disciplinary boundaries. This is unlikely to be an exhaustive list, with ad hoc seminars organised at shorter notice.

Highlights this term include RSC award winner visits from Klaas Wynne and Nick Le Brun, the Equality & Diversity talk from Polly Arnold, and the chemical education-themed talk from Tina Overton. There are many, many more – see the table below for some of this term’s seminars and look at the events page on the Departmental website for more information, as well as each edition of Chemistry Update.

Finally, I’d like to ask that we all make a sustained effort to attend a good proportion of the seminars. Not only is a vibrant seminar programme a great advert for the Department, with good attendance sending our visitors off with a positive impression of York, it also presents us all with a wonderful personal opportunity for learning, networking and career development.

- Derek Wann

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/01/19</td>
<td>Helen Fielding (UCL)</td>
</tr>
<tr>
<td>30/01/19</td>
<td>Igor Alabugin (Florida State)</td>
</tr>
<tr>
<td>13/02/19</td>
<td>Kylie Vincent (Oxford)</td>
</tr>
<tr>
<td>20/02/19</td>
<td>Zoe Pikramenou (Birmingham)</td>
</tr>
<tr>
<td>27/02/19</td>
<td>Robert Phipps (Cambridge); Hon Lam (Nottingham)</td>
</tr>
<tr>
<td>06/03/19</td>
<td>Anthony Meijer (Sheffield)</td>
</tr>
<tr>
<td>13/03/19</td>
<td>Katherine Holt (UCL)</td>
</tr>
<tr>
<td>20/03/19</td>
<td>Tina Overton (Monash University)</td>
</tr>
<tr>
<td>03/04/19</td>
<td>Klaas Wynne (Glasgow)</td>
</tr>
<tr>
<td>10/04/19</td>
<td>Emma Richards (Cardiff)</td>
</tr>
<tr>
<td>01/05/19</td>
<td>Nick Le Brun (East Anglia)</td>
</tr>
<tr>
<td>03/05/19</td>
<td>Polly Arnold (Edinburgh)</td>
</tr>
<tr>
<td>14/05/19</td>
<td>Renee Cole (Iowa)</td>
</tr>
<tr>
<td>05/06/19</td>
<td>Alison Stuart (Leicester); Ed Anderson (Oxford)</td>
</tr>
<tr>
<td>12/06/19</td>
<td>Susan Perkin (Oxford)</td>
</tr>
</tbody>
</table>
The Vikings are coming!

The University has invested £2.5 million in a new high-performance computing cluster. The new “Viking” cluster has the potential to be a transformative resource for the University and has been designed to meet a wide mix of research requirements.

It will be available to all researchers, including students, and will be free of charge to use. It will provide:

- 7000 Intel cores
- 8 top-of-the-range v100 GPUs
- 2.5PB of high performance storage
- High-performance Infiniband networking
- The ability to burst into public cloud services
- Interactive compute nodes

It is hoped that this facility will attract the best researchers and academics to York. It will also allow current academics to conduct their world-class research without the overhead of writing grants to secure time on other machines.

Dr Derek Wann, who represents the Department on the University’s Research Computing Working Group (RCWG), said: “This is a major investment from the University and I’d encourage all colleagues to consider trying out Viking to see how it might help in their research. We were lucky that both Mat Evans, through University Research Committee, and myself via RCWG, were able to influence the design of the new cluster.”

IT services are hosting a launch event on Thursday 14 February from 2pm (with a drinks reception at 4.30pm) in the Berrick Saul Building.

Speakers include:

Professor Sophia Ananiadou (University of Manchester)
Professor Carla Molteni (King’s College London)

All are welcome and registration is via the Eventbrite page.

Online Department suggestion box

The online Equality and Diversity suggestion box has been extended to be a suggestion box for the whole Department. You can submit your thoughts/suggestions/ideas for general Departmental matters as well as matters relating to Equality and Diversity. You can find the Google form on the intranet homepage or at this link.