



DEPARTMENT STAFF CONTRIBUTE TO CHEMISTRY WORLD PUBLICATION

In the May 2017 issue of Chemistry World Paul Cullis, a member of the editorial board, has provided his expert insight into what it takes to secure research funding. The article is available online [here](#) and in print: May 2017: Volume 14 : Issue 5, Page 60



Emma Raven also contributed to the publication, commenting on the Brexit question for the future of UK science. The article is available [here](#)

Chemistry Department receives Athena SWAN Silver Award



The Chemistry Athena SWAN self-assessment team, led by Dr Alison Stuart

The Department of Chemistry is delighted to have seen its efforts in tackling the unequal representation of women in science recognised, by achieving an Athena SWAN Silver Award. The award is in recognition of our actions that have already been put in place, the impact they have had, and of our future plans to address gender inequality. This positive action in the form of good practice that arises from implementation of the Athena SWAN ethos is of benefit to everyone in higher education, irrespective of gender.

A well-attended department-wide event was held on Tuesday 16th May in the MML to celebrate the department's achievement.



The self-assessment team at the department celebration, joined by Dr Naomi Irvine and Sophie Mason, who assisted with the submission.

SUPERSTAR AWARDS PRESENTED TO DEPARTMENT STAFF

Staff from the department have been awarded student-nominated 'Superstar' awards. These awards are for staff members who have gone the extra mile to help students achieve their goals.



Pictured above are three of the four staff members who were given Superstar awards - left to right - Dr Barbara Villa Marcos, Dr Dylan Williams and Dr Richard Blackburn. A special mention goes to Dr Williams, who was given a Superstar trophy as this is the third year running he has been the recipient of a Superstar award. Dr Kal Karim was also presented with a Superstar award for the careers guidance he gave to students.



FORENSIC SCIENCE SOCIETY WINS ACADEMIC GROUP OF THE YEAR

The Forensic Science Society, run by post-graduate chemistry students, won the award for Academic Group of the Year at this year's Student Awards ceremony.

The society has hosted esteemed guest lectures and have organised external trips. These have included a trip to Staffordshire for hands-on crime scene training and to Key Forensic Services for a taste of life and recruitment in the Forensic Science area. The society has also run outreach sessions for secondary schools.



Jonathon Brooks (President) and Jodie Louise Coulston (Secretary) attended the event (above). Congratulations to Jonathon and Jodie and also to Thalassa Valkenburg and Annelies Voorhaar (committee members).

Professor Emma Raven receives Royal Society Wolfson Research Merit Award



Professor Emma Raven has received a prestigious award for outstanding achievement and potential for her work exploring heme proteins.

The scheme, which is jointly funded by the Wolfson Foundation and the Royal Society, provides universities with additional support to enable them to recruit or retain respected scientists of outstanding achievement.

Professor Raven said: "It is a real honour to be given this award, and I am so grateful to the Royal Society for their support. I am looking forward to exploring new avenues of research during the course of the fellowship.

Professor Raven is deputy-director of the Leicester Institute of Structural and Chemical Biology, which was created in 2016 with the aim of bringing together the University of Leicester's established strengths in structural biology, chemical biology and single-molecule research.

Professor Andrew Ellis, Head of Department, said: "The Department of Chemistry is delighted that Emma has received this extremely prestigious award. This is a reflection of her high international standing and the superb quality of her research." Please click [here](#) for a link to the press release.

KAL KARIM SIGNS COOPERATION AGREEMENT WITH TIANJIN UNIVERSITY

In his most recent visit to China Dr Kal Karim, on behalf of the College of Science and Engineering, signed a cooperation agreement to establish a joint research laboratory with the College of Chemical Engineering & Materials Science, Tianjin University of Science and Technology, Tianjin, China.



Kal Karim was also interviewed by IQRA Bangla for his substantive contribution to Bangladeshi society. A copy of the interview can be found [here](#).



LEICESTER CHEMISTRY
STRONGLY REPRESENTED
AT TEAM LEICESTER
SPORTS AWARDS

Congratulations and well done to the following Chemistry students for their awards:

- Steven Oputa - Team Full Maroon (Men's Rugby Union)
- Adam Thomas - Club Colours (Boat)
- Hannah Walker - Individual Half Maroon (Boat)
- Munashe Fumhanda - Individual Half Maroon (Rugby League)
- Angus Hope - Team Half Maroon (Lacrosse)
- William Shieu - Team Half Maroon (Dodgeball)
- Niall Canavan - Club Colours & Team Half Maroon (Dodgeball)
- Josh Prestage - Club Colours & Team Half Maroon (Dodgeball)
- Akhil Sebastian - part of Most Improved Club (American Football – pictured below).



Dr Lowe's group well represented at high profile conferences

Vicki Emms, a final year PhD student, was one of only 35 PhDs and postdocs selected to present at the prestigious Sir Geoffrey Wilkinson Dalton Poster Symposium at The Royal Society of Chemistry, Burlington House. Vicki presented her work on utilising the polyamine transport system to deliver transition metal cancer theranostics, to peers and senior representatives from industry and academia.

Vicki paid another visit to London in March. Along with fellow group members Adhitiyarman, Adil Ali and Sarab Salih, they presented posters on their work at The Royal Society, Carlton House Terrace. The discussion meeting focussed on "Challenges for chemistry in molecular imaging". Between them, they presented work on dual mode magnetic resonance/optical imaging agents; probing the polyamine transport system for cancer cell selective delivery; metal complexes as dyes for imaging synaptic vesicles; zinc responsive MRI contrast agents.

Nada Alatawi also joined in with the conference season, attending another Royal Society of Chemistry event in Manchester. She presented a poster of her work on luminescent Pt(II) Complexes for Cellular Imaging, at the International Symposium on Advancing the Chemical Sciences: Challenges in Inorganic Chemistry.

Below is a picture of Dr Lowe's group and their posters.



FEMALE
DEPARTMENT
ACADEMICS WELL
REPRESENTED AT ACS
NATIONAL MEETING

Dr Alison Stuart was invited to talk at the 253rd American Chemical Society (ACS) National Meeting held in San Francisco in April 2017. Not only did she deliver a lecture on "Intramolecular fluorocyclisations of alkenes with a stable fluoroiodane reagent", but she also chaired a session at the ACS Fluorine Award Symposium in honour of Professor Antonio Togni, who received the 2017 ACS Award for Creative Work in Fluorine Chemistry.



Professor Emma Raven also attended and was invited to give a talk at the ACS meeting. The invites show a great achievement for these academics in their fields and will hopefully inspire female researchers working in the department.

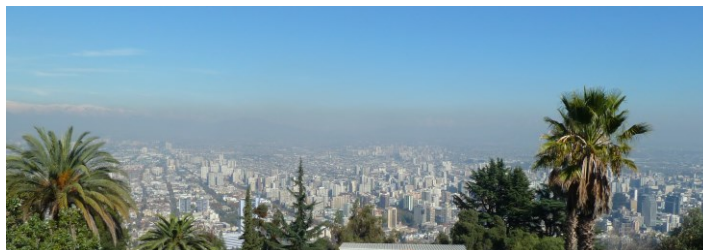
DEPARTMENT STAFF
NOMINATION
SUCCESS**Merit Awards**

Congratulations to the Caroline Bilson, Richard Blackburn, Gareth Bustin and Sandeep Handa, who were presented with merit awards in May this year.

Discovering Excellence Awards

Congratulations to the following staff members who have been nominated for Discovering Excellence Awards in the following categories:

Dylan Williams
Teaching Excellence
Alison Stuart
Equalities Champion
Andy Abbott
Enterprise Award
Gayle Price
Exceptional Team Member
Sergey Piletsky – Creative Innovator
Sandeep Handa – Student Experience
Emma Raven – Research Excellence

Dr Zoë Fleming investigates air pollution in Chile

Dr Zoë Fleming, a post-doctoral researcher and the recipient of a Santander award, travelled to Santiago, Chile in May 2017 where she studied air quality with Laura Gallardo and contacts from the Centre for Climate and Resilience Research (CR2). Santiago is a megacity of some 7 million people and due to its position in a basin in between the coastal range mountains and the Andes, any air pollution tends to build up and stagnate.

Zoë gave a talk in her first week, which helped to start a dialogue with all the other researchers there about how her expertise could be used to work together with them.



Zoë runs an air dispersion model developed by the UK Met Office (the NAME model) that was developed after the Chernobyl nuclear explosion to follow the transport and movement of air masses either forwards in time or to track where air has travelled. Zoë ran this model in Santiago with CR2 and other researchers so that they could interpret the influence of the city on the surrounding areas.

UNESCO WOMEN IN
SCIENCE EVENT

One of our PhD students, Jasmine Wareham, was one of ten selected finalists from over 500 entries, chosen to present a poster at this year's L'Oréal-UNESCO For Women In Science Awards Ceremony at the Royal Society in London. She presented her poster entitled "New instrumentation to monitor the air we breathe".



Jasmine with Professor Uta Frith, photo – L'Oréal

Jasmine's research involves developing a new highly sensitive and selective instrument to accurately quantify nitrogen dioxide (NO₂) levels in the air we breathe as NO₂ has a detrimental effect on health. By improving methods for measuring air pollution limits can be accurately enforced and the effects of air pollution can be controlled.



DEPARTMENT OF CHEMISTRY WELL REPRESENTED IN 3 MINUTE THESIS COMPETITION

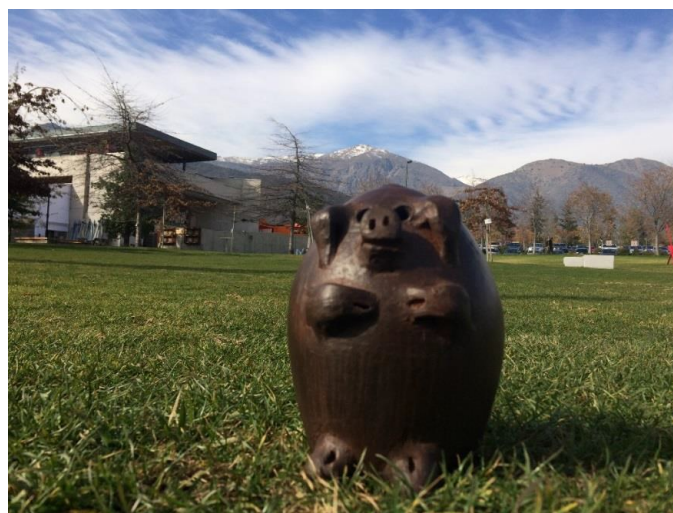
Out of a field of 14 competitors, 3 PhD students from the Chemistry department took part in the University's 3 minute thesis competition on 31st May. As part of the competition students have a maximum of 180 seconds to present their research topic to five expert judges.



Congratulations to Georgina Girt, Ioanna Pateli and Jasmine Wareham (pictured with the other finalists above) for reaching this stage of the competition.



Zoë was given a tour of the air quality monitoring station in the city centre and visited a research group at the Universidad del Desarrollo that deals with environmental data networking and visualisation. The group used many small sensors to measure Particulate Matter at various heights and locations and used this to get a better idea of the spatial, elevation and time profiles of the pollution in the village and combined this with a website and community engagement project.



Casing for the air quality monitors used by the Universidad del Desarrollo

Overall the visit strengthened Zoë's ties with the researchers as she looks to work with them in the coming months. For Zoë's full blog post click [here](#).



Zoë was also featured on the BBC's Inside Out programme, discussing city centre air pollution and its effects on pedestrians. For more information about the NERC-funded air quality project please click [here](#)

RSC ORGANIC DIVISION MIDLANDS MEETING HELD IN DEPARTMENT

On 5th April 2017, the department hosted the RSC's Organic Division Midlands meeting. 90 delegates attended the event, which included talks from academics, including Leicester's Dr James Hodgkinson, and a poster competition which had strong representation from Leicester postgraduate students.



Congratulations to Georgina Girt who won first prize in the poster competition.



Thanks to all Leicester staff and students for their help with the event.



DEPARTMENT OF
CHEMISTRY
REPRESENTED AT THE
DOCTORAL INAUGURAL
LECTURES

The Department of Chemistry was represented at the Doctoral Inaugural Lectures by Dr Gemma Geary, who presented an excellent lecture on 'Taming Fluorine: The Preparation of a New Fluorinating Reagent for the Synthesis of 21st Century Medicines'.



After completing her PhD in 2015, Gemma moved to the University of Nottingham as a Postdoctoral Research Fellow in Organic Chemistry with Professor Chris Moody and in June 2017 she started working at Sygnature Discovery in Nottingham.

Outreach news

The Outreach team has been very busy in the past three months. As part of the RSC-funded project, we have visited three local schools in several occasions to deliver outreach activities based on the research carried out in the department. We have visited Rushey Mead Academy, Sir Jonathan North Community College and Wigston Academy and just over 1,000 year 8 and 9 pupils have participated in up to 4 outreach activities each in the last three months.



The department also hosted the Salters' Festival of Chemistry on 8th June, where pupils from 17 local schools competed in the Salters' Challenge in the morning and the University Challenge in the afternoon, followed by a chemical magic demonstration. Their teachers had the opportunity to participate in two CPD activities: workshops in flipped teaching and how to make a homemade polarimeter.

On 20th June the department organised a Spectroscopy visit for teachers. 8 local schools were represented in this workshop. The teachers had the opportunity to learn more about NMR spectroscopy and MS spectrometry, receive some practice material for their teaching and run their own samples!

I would like to thank Phil Young, Dylan Williams, Karl Ryder, Gerry Griffith, Corey Evans and Richard Blackburn for their time spent delivering some of the outreach activities. I would like to thank as well all the PGR and UG students involved for their time and enthusiasm.

Barbara Villa-Marcos

OUTREACH EVENT
INSPIRES
BANGLADESHI
CHILDREN TO GO TO
UNIVERSITY



On 1st June 2017 the department hosted an outreach event for 25 Children aged between 9 and 17 years old from 10 schools in Leicester who attend the Darus Salam Mosque. The activities were led by Dr Kal Karim and Dr Barbara Villa Marcos and included an interactive quiz with prizes and a lab experience. Masquerading as a crime scene, the children pretended to be detectives in the teaching lab, taking fingerprints, analysing samples and solving cryptic clues to get to the bottom of the 'murder in the lab'.

The school trip also enabled discussions between the University and Bangladeshi community and how they can work together in the future on a number of issues, including that of inspiring children to go to University.



HASIM MUNAWAR WINS ELTU PRIZE

Congratulations to Hasim Munawar, an MPhil student in the department who was awarded with the 1st Prize Judges Choice award at the English Language Teaching Unit's post graduate research festival.



Hasim presented a poster to three guest academic judges and a variety of visiting students and members of the public.

Phil Horspool, Director of the ELTU, stated that 'The Postgraduate research festival is a great opportunity for international PGR students to present their research to a real and diverse audience.'



Gayle Price involved in collaboration to explore creative and visual responses to DNA research



Gayle Price, the department's Scientific Glassblower, is currently collaborating with Gillian McFarland and Ruth Singer as part of a project, funded by Arts Council England, to explore the work of researchers in genetics labs including archaeological DNA, plant and yeast genetics.

As part of the project Gayle rehomed surplus glassware from Chemistry stores and made it into art. The collaboration was featured on BBC Radio 4 Inside Science on 11th May 2017 (link [here](#)). With Gillian and Ruth Gayle is developing work to be exhibited from September to December 2017. For more photos and information click [here](#).



Mutation

PROFESSOR PILETSKY GIVES TALK AT CELL CULTURE AND DOWNSTREAM WORLD CONGRESS

Professor Sergey Piletsky gave an invited talk at the Cell Culture and Downstream World Congress 2017 in Munich.

His paper 'In Vivo Recognition of Human Vascular Endothelial Growth Factor by Molecularly Imprinted Polymers' has been published by NanoLetters (impact factor – 14).

In other news, Sergey has secured a £300,000 investment into the University spin out company MIP Diagnostics.

SIX SPOONS CHALLENGE

Recently Dominic Banks, Dylan Williams and Richard Blackburn undertook a challenge of epic proportions, visiting all 6 of Leicester's Wetherspoons in the same day!

