UNIVERSITY OF BIRMINGHAM

School of Chemistry Community

Part of THE EPS COMMUNITY



Spring 2018

Greetings,

It is with some sadness that this will be the last newsletter I will contribute to as Head of School. My term of office as Head will come to an end on the 31 August, after 7 years and 4 months in the hot seat. It has been an absolute pleasure to be the Head, and I hope that has come through in my newsletter writings and the annual Alumni Day presentation over the last 7 years. Thus, as I reflect on the last 12 months or so, I can say once again the School has gone from strength to strength, as a result of the commitment and drive of a really excellent and hardworking group of staff, working alongside our equally excellent undergraduate and postgraduate students, and continued major investments from the University.

You will recall in the last newsletter, a big part of the news was the award of the Nobel Prize in Chemistry to <u>Professor Sir J. Fraser Stoddart FRS</u> for the research he and his group carried out in the School in the 1990s on Molecular Machines. I hope by the end of this Newsletter I might convince you that we are laying the foundations for winning a third Nobel Prize!

So, let me pick some highlights from the last 12 months or so:

1. In the National Students Survey we achieved a 98% overall satisfaction, ranking us 1st within the UK's Russell Group Schools of Chemistry; a position that we achieved in 2013 as well. This 98% also puts us in the top 10 of all 50+ Schools of Chemistry. We have consistently maintained our 90% or better overall satisfaction for the last 8 years, keeping us in an elite group of only 4 Schools of Chemistry to do this.

- 2. Our undergraduate student employability this year saw us 5th amongst the 22 Russell Group Schools of Chemistry.
- Last year at a time when applications to study degree level chemistry fell by 10%, we saw a 10% increase to our courses, which was reflected in a high quality intake of students in September 2017.
- 4. These three points above have seen us have the confidence to raise once again our A level entry requirement, such that it now stands at three As at A Level.
- Dr Natalie Rowley was awarded from the Higher Education Academy a National Teaching Fellowship.
- 6. We have appointed 5 new academics:
 - University of Birmingham Fellow, <u>Dr Phoebe Allan</u> from the University of Cambridge
 - Senior Lecturer and University of Birmingham Fellow, <u>Dr Ruchi Gupta</u>
 from the University of Hull, who has won an £1M EPSRC Healthcare
 Technology Award
 - Three professors
 - Professor Tim Albrecht from Imperial College London
 - Professor Rachel O'Reilly from University of Warwick, who holds a prestigious European ERC fellowship
 - Professor Andrew Dove also from University of Warwick, who also holds a prestigious European ERC fellowship
- 7. The School, through Dr Paul Anderson, won £11m from the EPSRC Faraday Institute to carry out research into the chemistry of the circular economy in particular the recycling of lithium ion batteries.
- 8. Professor David Philips CBE FRS, one of our most distinguished alumni (1960s BSc and PhD graduate), and a past RSC President, returned to campus a few weeks ago to deliver the EPS College Distinguished Lecture. This was a fantastic day in which David interacted with a group of our undergraduate students in a roundtable discussion, quizzing him on topics ranging from his career to climate change, followed by his lecture and dinner with several other of his close friends and classmates.

Looking to the future, the School will be taking occupancy of its new undergraduate laboratory teaching facilities in July – The Collaborative Teaching Laboratory. This £40M facility will see state-of-the-art equipment that is more akin to being found in research labs, for example benchtop electron microscopes and NMRs, and an x-ray diffractometer, being used to deliver a first class undergraduate curriculum. It will be a superb facility to equip our students for the next phase of their career. A more recent development has been the commitment to a new research building – the Molecular Sciences Building. This will house all of the School of Chemistry's research activity, as well as 16 environmental scientists and 3 pharmacy staff. The ethos of this hub is to drive innovation and world leading research by collocating research groups of congruent disciplines. We are currently working with the architects and engineers in the design phase of this £80M development,

which is scheduled for completion at the latter end of 2021. Of course, having such infrastructure developments is only one part of the equation, and this one is going hand-in-hand with a further ~20% increase in staff numbers over the next 5 or so years.

As we look to the future I should also pause and let you know that two long-serving members of support staff are retiring this month who many of you will know, and who have contributed tremendously to the School. Rachel Sturman, the Senior Undergraduate Laboratory Technician, and Stuart Arkless, formerly the Senior Technician in the late Prof lan Smith's research group, and latterly the School's Estates Manager, are retiring after a remarkable 40 and 48 years of service to the School respectively. I am sure many of you will remember Rachel and Stuart fondly from your own time in the School. Rachel is moving to the Lake district to enjoy the great walks. Stuart, however, is starting a second part-time career working in the University Estates Office as a liaison on the Molecular Science Building project, so the School will still have lots of interaction with him as he approaches 50 years of service to the University! Also, Professor Nigel Simpkins retired in December 2017 after joining the School from University of Nottingham in 2007. Nigel played a key part in the School over the last decade in a number of roles including Director of Research. We wish all three of them a happy retirement as they embark on new activities.

So, as I sign off for the last time as Head of School, you can expect my successor to be telling you of many new innovations and successes as we enter into a transformative time. I hope you agree we are laying the foundations for the third Nobel Prize in Chemistry, in what will be a golden age for the School of Chemistry at the University of Birmingham!

I look forward to seeing many of you at future alumni events.

With very best wishes,

Jon

Professor Jon Preece Head of School



Light Up Your Life

Professor David Phillips, alumnus and Past President of the Royal Society of Chemistry, returned to campus in March to deliver the 2018 EPS Distinguished Lecture. David shares his personal journey from raw Birmingham undergraduate in 1958 through a successful academic career and an extraordinarily busy and fulfilling life. His full lecture is available to view along with an interview by our scientific journalistic society SATNAV.

WATCH PROFESSOR PHILLIPS' LECTURE >



Nerve agents: what are they?

Following recent press coverage of the reported use of nerve agents in the UK, Dr Simon Cotton writes for The Conversation. In his article he explains their original, what they are



£42 million for Energy Storage

The Faraday Institution announced up to £42 million in new government funding to four UK-based consortia to conduct application-inspired research aimed at overcoming battery

and the critical affect they can have on the body.

FIND OUT MORE >

challenges to accelerate the electric vehicle revolution.

FIND OUT MORE >

WE ARE BIRMINGHAM

Our 300,000 alumni all share one thing in common: the University of Birmingham. From recent graduates to industry leaders, you are making important things happen. Join the "We Are Birmingham" project and share your story with those following in your footsteps. You can inspire our students and offer an insight into the vast array of opportunities waiting for them; whatever you're doing, they want to hear from you. Plus, anyone who submits a profile before 1 July will be entered into a draw to win a hoard of University merchandise. Share your Birmingham story and help shape their future.

SHARE YOUR CAREER STORY >



Alumni spotlight

Carly Thomas graduated in 2015 and is now an Assistant Dealer at Nationwide Building Society. She

GIVE. VOLUNTEER. CHANGE 10,000 LIVES.

Get involved

Since the 10,000 Lives campaign launched in September, alumni and friends of the University have

reflects on her time at Birmingham and offers an insight into her new career.

To share your story simply fill complete our **online career profile** or **email us**. We'd love to hear from you.

FIND OUT MORE >

changed the lives of 1,062 young people. 200 of these are students in the College of Engineering and Physical Sciences!

Will you step forward and change a life?

FIND OUT MORE >

University Reunion 2018

The Alumni Reunion 2018 is a great opportunity to rediscover what made Birmingham "home" for you and renew your lifelong connection to this special place. Reconnect with friends and classmates and see how Birmingham has grown into the university it is today. Join us for a day of celebrations including campus tours, stress-free lectures, a chance to visit some of the latest additions to campus such as the new Library, Sports Centre and Collaborative Teaching Laboratories, and plenty of time to reminisce. In the morning you will visit us in Chemistry and hear how we have changed since you were last with us. You never know there may be some familiar faces there with you!



FIND OUT MORE >



Society news: A year with ChemSoc

There are now four student groups in Chemistry: <u>ChemSoc</u>, <u>WISE</u>, <u>oSTEM</u> and <u>SATNAV</u>. Each does fantastic work to support the experiences of students in our School.

The College of Engineering and Physics Sciences is home to 29 student societies. It's been an amazing year of careers activities, volunteering and, of course, social events so there's plenty to tell you.

FIND OUT MORE >



EPS Societies' Awards 2018

Were you a member of a society? Wish you had been? Or have you been impressed reading about our **student groups**? Why not nominate them for an EPS Societies' Award.

These Awards celebrate the lengths our students go to make the University a better place. Join our celebrations by nominating your society; maybe they'll win the much coveted *Society of the Year* trophy.

NOMINATE >

News Round-Up

We are sad to report the **passing of Professor Ian Smith FRS**, who died on 8 November 2016. He was appointed to the Chair of Physical Chemistry here in 1985, made Mason Professor in 1991, and Head of School from 1989 to 1993, then again briefly in 2001.

<u>Applications for PhD studentships on iDesign</u> cutting-edge organic synthesis drug-discovery research project, are now open.

The UK's world-class expertise in the research of biofilms has been recognised through the launch of a new National Biofilms Innovation Centre (NBIC).

Together with colleagues in the University's Institute of Cardiovascular Sciences we have **designed gold nanoparticles** which can be coated and used to track blood flow in the smallest blood vessels in the body.

Fourth year undergraduate student Helena Dodd has been **shortlisted for a 2017 STEM Inspiration Award** for her work in mentoring girls from disadvantaged backgrounds.

Dr Melanie Britton becomes <u>first female chair the Division of Spatially Resolved</u>

<u>Magnetic Resonance of the Ampere Society</u>.

<u>Internationally renowned polymer chemists</u>, Professor Andrew Dove and Professor Rachel O'Reilly, joined the University in early 2018, bringing their great depth of expertise in the area of polymer chemistry, biomaterials and materials science to the School.

Broadcaster, journalist and University honorary graduate <u>Simon Singh delivered the 2017</u> <u>EPS Christmas Lecture</u>. Our scientific journalistic society SATNAV interviewed him during his visit.

From the many inspiring research projects across the University, we've selected three that have the potential to change lives. Which one is your favourite? **Vote for the project**you're passionate about and the University will fundraise for the winner over the next year.

Events

A full list of alumni events, including Reunions and Global Gatherings, is available online. Here are just a few events coming up in Chemistry and the College of Engineering and Physical Sciences:

Wednesday 6 June

EPS Societies' Awards

Celebrate with your student society as we recognise their extraordinary achievements with a gala, black-tie evening.

Time: 7pm-11pm

Venue: Great Hall, University of Birmingham

Sunday 26 - Thursday 30 August

EuroBic14

The European Biological Inorganic Chemistry Conference (EuroBIC) series has become a highly established international meeting. Attracting scientists from all over the world, EuroBIC provides the major platform to present and discuss the latest developments in all fields at the interface between Inorganic Chemistry and the Life Sciences.

Wednesday 19 September

London Mathematical Society Popular Lectures

We are proud to begin the 2018/19 Birmingham Popular Mathematics Lecture series with the London Mathematical Society Popular Lectures, which are suitable for all who have an interest in Mathematics, presenting exciting topics in mathematics and its applications. This year Katie Steckles (Maths's Greatest Unsolved Puzzles) and Jennifer Rogers (Risky Business) will be speaking

Time: 6:30-9pm

Venue: Bramall Music Building, University of Birmingham

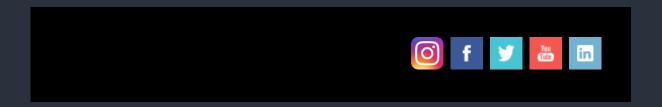
Saturday 29 September

University of Birmingham Alumni Reunion

Join us for the big Anniversary Reunion on Saturday 29 September 2018. Whether you're celebrating your 50th anniversary or your 5th anniversary, come back to the Edgbaston campus and celebrate your University with staff, students and fellow alumni.

Time: 10am-5pm

Venue: University of Birmingham, Edgbaston Campus



You are in control of your data. We want to stay in touch with you and keep your information in accordance with your wishes. You will be kept updated with news from our campus, including research, educational activities and courses, events, alumni activities, and opportunities to support our fundraising and volunteering programmes. Depending on your preferences, you will receive communications via post, email, telephone, SMS text messages, and social media. We would like to ensure that our interactions with you are appropriate and cost-effective. We will pay attention to your responses (including e-tracking) and, from time to time, may use your data for profiling, wealth screening, targeting, and research purposes. Your information will be held securely by the University of Birmingham and will only be made available to our academic & administrative departments, recognised alumni groups, and trusted agents acting on behalf of the University. We will never sell your personal data or share it for non-University of Birmingham programmes. If you decide to donate to the University, you can choose whether to give anonymously or be recognised on our Donor Rolle of Honour. Information on how your data is held and used is set out in our Data Protection Statement at www.birmingham.ac.uk/dataprotection. If you wish to opt-out of any contact or have any questions about your personal data, please contact Luke McGarrity on L.McGarrity@bham.ac.uk. Our Inland Revenue Charities reference number is X7237.

