

UNIVERSITY OF  
BIRMINGHAM

## School of Chemical Engineering Community

Part of  
THE EPS COMMUNITY



### Spring 2018

Greetings,

I'm pleased to be able to write to you to tell you some of the new and exciting developments in the School. Our undergraduate intake remains as strong as ever with close to 180 new students starting their academic journey with us last September. As I write to you, the students are getting to grips with revision season. The third and final year students have just submitted their design and research projects respectively; with hopefully not too many sleepless nights as a consequence.

In research, the School has won some major new projects including a multi-million pound [Faraday Institution](#) project on the recycling of lithium ion batteries (ReLiB). This multi-disciplinary project will tackle the most demanding technical challenges in sensing, gateway testing, robotic sorting, re-use, recycling and characterisation. The School is also involved with the new £3M [Scar Free Foundation Centre for Conflict Wound Research](#) in the development of wound dressings. Based at Birmingham's Queen Elizabeth Hospital this will be the UK's first specialist medical research centre to reduce the impact of scarring and improve the lives of Armed Forces personnel and civilians wounded in conflicts and terrorist attacks. These new projects are testament not only to the imagination and skills of our academics within the School, but again demonstrate how the strength and diversity of our research delivers genuine impact to deliver new technologies and improve quality of life.

The School continues to grow as we seek new academic appointments at both senior and junior level. We are delighted to announce three new appointments of Professor Eddie Pelan to a Chair in Chemical Engineering, and Dr Kit Windows-Yule and Dr Dave Bassett to lectureships. Prof Pelan, formerly of Unilever Vlaardingen, strengthens our

world class activities in food and microstructure engineering. Dr Windows-Yule brings his expertise to support our activities with the School of Physics and Astronomy in the Positron Imaging Centre, and Dr Bassett's interests include the development of improved biomaterials for regenerative medicine.

With best wishes for a pleasant spring.

**Professor Mark Simmons**

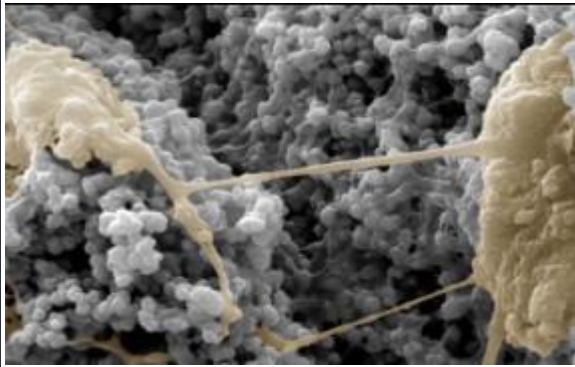
**Head of School**



## Chemical engineer Dr Sophie Cox needs your vote!

We are very proud that of the many extraordinary research projects across the University, our own Dr Sophie Cox has made it to the final of the Alumni Office's Philanthropic Research Project. Sophie is leading a team engineering novel medical systems to fight antimicrobial resistance. The finalists also include Dr Andrew Beggs whose team is growing mini tumours to improve cancer treatments, and Dr Paul Lynch who is changing the lives of children with disabilities in Malawi. Vote for the project you're passionate about and the University will fundraise for the winner over the next year. Meet the Philanthropic Research Project 2018 final three and cast your vote.

[CAST YOUR VOTE>](#)



## Self-structuring model of bone tissue

Researchers from the Healthcare Technologies Institute have developed a new self-structuring model of bone tissue that simulates the architecture of real bone for the first time – a potential for future bone defect replacement.

[FIND OUT MORE >](#)



## £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 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.



## Alumni spotlight

In March new graduate William Davies was interviewed by *The Chemical Engineer* discussing the importance of outreach to encourage young people into engineering.

To share your story simply fill complete our [online career profile form](#) or [email us](#). We'd love to hear from you.

[FIND OUT MORE >](#)

**GIVE.  
VOLUNTEER.  
CHANGE  
10,000 LIVES.**

## Get involved

Since the 10,000 Lives campaign launched in September, alumni and friends of the University have 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 Chemical Engineering 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 >](#)



## Societies News: BUCES on top again!

There are now nine student groups in Chemical Engineering: [BUCES](#), [Eagles Hockey](#), [EWB: Birmingham](#), [Engineering Rugby](#), [Mixed Netball](#), [WISE](#), [oSTEM](#), [SATNAV](#) and the new [Cameroon Catalyst](#).

The College of Engineering and Physical Sciences is home to 29 student societies. It's been a great year of industrial events, volunteering, competitions and, of course, socials so there's plenty to tell you.



## EPS Societies' Awards 2018

Were you a member of a society while at Birmingham? Wish you had been? Or have you been impressed reading about the activities of 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.

## News Round-Up

Professor David Phillips, alumnus and Past-President of the Royal Society of Chemistry, delivered the latest [EPS Distinguished Lecture entitled "Light Up Your Life"](#).

Birmingham chemical engineering and medical researchers are to play a crucial role in the UK's first ever specialist research centre aimed at [minimising the impact of scarring](#) among Armed Forces personnel and civilians wounded in terrorist and other attacks.

Mike Adams, Professor in Product Engineering and Manufacturing, discusses his recent research paper ["Why pens have rubbery grips"](#) which explains how the composition of our finger pads affects the way we find it easier to grip some surfaces better than others.

The University has signed an agreement with the University of Science and Technology Beijing (USTB) to [create new education programmes for Chinese students](#).

Chemical engineers have found a way of [mimicking our body's natural healing process](#), using cell derived nano-sized particles called vesicles, to repair damaged tissue.

Students from a variety of disciplines across the College of Engineering and Physical Sciences, including Chemical Engineering, [won the prestigious Vice-Chancellor's Challenge](#) for their teams' pioneering design of a solar aid pod.

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).

[International particle technology forum](#) helps strengthen research ties between Birmingham and China.

New centre launches to help small and medium-sized businesses accelerate the [development of medical innovations](#).

Broadcaster, journalist and University honorary graduate [Dr Simon Singh delivered the 2017 EPS Christmas Lecture](#). Our scientific journalistic society SATNAV interviewed him during his visit.

## Events

A full list of alumni events, including Reunions and Global Gatherings, is available [online](#). Here are just a few events coming up in Chemical Engineering 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

#### **Wednesday 4 - Saturday 7 July**

##### **[5th UK-CN Steel Research Forum](#)**

The UK-China Steel Research Forum is a well-established biennial academic conference for steel researchers across the UK and China, with support from major steel-making companies, steel research institutions and research funding bodies from both countries. This year's conference will be held in conjunction with the 16th Conference of Chinese Materials Association in the UK on Materials Science and Engineering.

#### **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](http://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](mailto:L.McGarrity@bham.ac.uk). Our Inland Revenue Charities reference number is X7237.