



Spring 2014

Greetings,

Student enrolment is buoyant - over the last few weeks we have experienced unprecedented interest in undergraduate and postgraduate (taught) programmes in our STEM disciplines. This reflects league table positions, the 'University of the Year' premium and the fantastic effort by all those involved in recruitment activities.

Job prospects in STEM continue to thrive and there is strong governmental encouragement to grow talent to support these sectors. We shall be responding to this opportunity through selective growth in certain disciplines that can also grow quality. The recent news that the University of Birmingham has scooped [three new national awards](#), including one for the School of Chemical Engineering for its work to further and support the careers of women is a great step in the right direction. We have also welcomed Chancellor George Osborne's announcement to develop [22 new centres for Doctoral training](#), in particular the new centre for Doctoral Training in Formulation Engineering and the Centre for Doctoral Training: Physical Science for Health, both of which will be hosted at The University of Birmingham.

Always seeking to enhance the learning experience, a number of staff within the college are exploring innovative engagement and teaching methods, including (to name just a few), pre-laboratory videos (aka lab flipping) in Chemistry, Chemical Engineering and EECE, interactive lectures in Chemistry and Smartphone/Tablet Apps in Metallurgy & Materials and Computer Science. I look forward to seeing how these tools and techniques can enhance learning and flexible teaching.

The spring terms has seen a number of achievements and new appointments, including the appointment of [Professor Mark Simmons as the new Head of School for Chemical Engineering](#), and the [fellowship award to the Royal Society for David Charlton](#), Professor of Particle Physics in the School of Physics and Astronomy. In Chemistry, Dr Simon Cotton - honorary senior lecturer in the School of Chemistry - was [acknowledged in the New Year's honours list](#) with the award of the British Empire Medal for his services to Chemistry and Education. Our EPS students have also been [awarded prestigious scholarships](#) from BP STEM and Caterpillar UK. As well as financial support these students will have unique access to the energy industry with the opportunity to attend a number of key events – a great achievement.

Lastly, as we enter the final few weeks of the 2013-14 academic year, I'd also like to take this opportunity to remind you of your invitations to the next [Distinguished Lecture 19 May](#) and the first [EPS Reunion](#). Similar to that of the University's Annual Alumni Reunion event, we are inviting all former students of the College to return to campus on Saturday 14th June to reminisce with us. If you have not secured your place already, bookings are open for just three more weeks, so to avoid disappointment I would urge you to book your ticket! With lots of activities already

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planned, it really is set to be a great day and I look forward to welcoming you back to the campus.

With best wishes



Professor Richard Williams
Head of College, Engineering and Physical Sciences

[Metallurgy and Materials Community](#)

[Physics and Astronomy Community](#)



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Top stories from the College

Don't miss out! Book your place onto the EPS Reunion 2014!



Do you have fond memories of your time at the University of Birmingham? Do you still keep in touch with those classmates who you pulled all-night study sessions with, to get that last assignment finished? As a graduate of the School of Chemical Engineering, we'd love for you to join us on campus on Saturday 14 June 2014 for a Reunion. [Read more.](#)

Chancellor George Osborne announces 22 new Centres for Doctoral Training



The College of Engineering and Physical Sciences has received a boost after 22 new Centres for Doctoral Training (CDTs) were announced by the Chancellor of the Exchequer, The Rt. Hon George Osborne MP. The University of Birmingham will host one of these of new centres in the area of Formulation Engineering. [Read More.](#)

In the driving seat of fundamental science



Quark-gluon plasma, cryogenic energy storage and radar systems that allow cars to adjust their speed automatically, without the driver doing a thing, may not appear to have much in common. But they are all examples of cutting-edge scientific discoveries that have grown out of the research within the College of Engineering and Physical Sciences.

Richard McComb met Professor John Bridgeman, Director of Research and Knowledge Transfer, in March to discuss the reach and impact of research in the College of Engineering and Physical Sciences. Read the article in full [here](#), discuss the reach and impact of research in the College of Engineering and Physical Sciences. Read the article in full [here](#).

Powdered alcohol and space diapers have something in common



Powdered alcohol has been in the news again this week. Palcohol is the hottest new thing to hit the US market, a powder that dissolves in water to give different types of alcoholic drinks, including rum, vodka and several cocktails. Dr Simon Cotton comments on the debate in Chemistry World. [Read more.](#)

Nanomaterials: no small matter



Birmingham Fellow, Pola Goldberg Oppenheimer, leads a research group focusing on Advanced Materials, Structures and Applications (AMSA) in the School of Chemical Engineering. This summer, Pola will address listeners at the 2014 Soapbox Science event at London's Southbank having been selected as a leading UK female scientist. Read about Pola's research and her passion for science as a career [here](#).

HIT Team Delivers Innovative Solutions for Future Defence Systems Design



EECE's Human Interface Technology Team has successfully delivered two innovative experimental test beds designed to investigate emerging and future mixed reality technologies for the design of future submarines and reconfigurable command and control centres. [Read more.](#)

UoB Developments in Drug Discovery and Medicinal Chemistry



The University is developing a number of initiatives in the area of molecular drug discovery, involving collaborations spanning the university, and includes the launch of a new postgraduate taught Master's degree in Drug Discovery and Medicinal Chemistry. [Read more.](#)

TSB chooses start-up specialist to replace David Bott as innovation chief

A College of Engineering and Physical Sciences alumnus, and honorary Professor, has been named the new director of the Technology Strategy Board. [Read more.](#)

Collaborative effort with Computer Science student helps boost fundraising



As a trustee on one of the trusts which support University of Birmingham scholarships, David Seccombe has played a very active role in supporting students to achieve their full potential. So when he decided to embark on a charity trek across the coast of North Wales, Computer Science student Kian Mistry, stepped in to return the favour. [Read More.](#)

An update from your Community

Birmingham academic recognized as inspirational scientist and engineer



Congratulations to our very own Head of College, Professor Richard Williams, who has been recognised by the Engineering and Physical Sciences Research Council (EPSRC) as one of their inspirational scientists and engineers. [Read more.](#)

Dr Simon Cotton awarded British Empire Medal



The School of Chemistry is delighted to announce that Dr Simon Cotton, honorary senior lecturer, was presented with the award of the British Empire Medal at a special presentation event on 28th April, for his services to Chemistry and Education. [Read more.](#)

New Head of School for Chemical Engineering



The School of Chemical Engineering is delighted to announce that Professor Mark Simmons has been appointed as the new Head of School. [Read more.](#)

EPS colleague elected Fellow of the Royal Society



Professor David Charlton has been elected Fellow of the Royal Society, a fellowship of many of the world's most distinguished scientists and the national Academy of Science in the UK. Read about Professor Charlton's achievements [here.](#)

EPS students secure major scholarships



Earlier this year EPS students were awarded prestigious scholarships from BP STEM and Caterpillar UK. These scholarships are awarded to high performing students, and offers them the opportunity to showcase their talent. [Read more.](#)

A Day In The Life



April saw the launch of a new series of 'Day in the Life' videos designed to capture the varied activities of many of our EPS students, as part of University life. [View the videos online here.](#)

Missed out on our last edition of the Schools' Newsletters?

Do you have a feeling that your last School's Newsletter missed your inbox, or got lost in a heap of emails?

If you'd like to catch up on past news from your School, simply visit our PDF archive [here](#)

Your College needs you!

Would you be able to share some of your time, expertise or connections to help our students to succeed?

We're currently looking for help and support from alumni with the following:

- **EPS Open Days, 26-27 June.** Could you donate a couple of hours of your time to pop back to your old school and speak to our prospective students about your time at Birmingham? For more information and to get involved [email us](#)
- All women in science and engineering. As part of **National Women in Engineering Day, 23 June**, the EPS Community is hosting a number of activities, conversations and events designed to celebrate women in engineering and scientific careers. If you work in science or engineering and would like to sit on our panel, get involved in the conversation on twitter, or come along to our evening event, please get in touch by [emailing us](#)

There are many ways in which you can give a little back to the university. Details can be found [online](#), and you can [email us](#)

Why did you choose to study at Birmingham? What was the best thing about your time here?

Our current and prospective students would love to hear how it was you came to study at Birmingham and how life has been since.

Would you be able to donate 30 minutes of your time to provide a [career profile](#)?

By sharing your experiences, you can provide students in the College of Engineering and Physical Sciences with invaluable tips, advice and perspectives on the vastly differing career paths they can take after they have graduated, and help open up new ideas! All profiles will be displayed on the website.

EPS events taking place shortly...

Monday 19 May 2014

[EPS Distinguished Lecture: Professor Paul Cannon](#)

Professor Paul Cannon, Professor of Radio Science and Systems, delivers the second EPS Distinguished Lecture. Minor explosive eruptions of energy from the Sun that cause small solar storms on Earth are relatively common events. In contrast, extremely large events (superstorms) only occur very occasionally – perhaps once every century or two. Since the start of the space age, there has been no true solar-superstorm, but there have been a number of large storms and some of these have caused major technological damage. This lecture will explore the scientific background to these events, the likely impact of solar superstorms on a variety of engineered systems and will identify ways to prepare for these low-probability but randomly occurring events.

Time: 6–7.30pm

Venue: Lecture Theatre G32, Mechanical and Civil Engineering Building, Edgbaston Campus

For more information please email us at eps-community@contacts.bham.ac.uk

Thursday 22 May 2014

[Professor David Evans' Inaugural Lecture: 'Making Mini Bangs at the Large Hadron Collider'](#)

Professor Evans, Professor in High Energy Physics, will give a basic introduction to current knowledge of elementary particles - the building blocks of matter - and the forces which act between them before describing the Quark-Gluon Plasma and how to make it. Some key features of the CERN LHC and the ALICE experiment at CERN will be presented together with some key results.

Time: 5.15–7pm

Venue: Lecture Theatre 117, Physics West Building, Edgbaston Campus

For more information please email us at eps-community@contacts.bham.ac.uk

Wednesday 11 June 2014

[Civil Engineering Clarke Lecture 2014: 'Intelligent Mobility' - Steve Yianni, Chief Executive, Transport Systems Catapult Ltd](#)

Efficient transport systems are essential to the success of the UK, its businesses, its economy and its people. Over recent years, the global demand for transport has increased significantly faster than the investment required to meet it. The challenge is how to increase 'mobility' and work intelligently in order to develop improved transport systems that unlock latent capacity. Steve will share how Transport Systems Catapult is working with the UK's world-leading academics, engineers, consultancies and constructors to turn transport innovations into commercial reality.

Time: 5.15–7pm

Venue: Lecture Theatre G31, Civil Engineering Building, Edgbaston Campus

For more information please email us at eps-community@contacts.bham.ac.uk

Saturday 14 June 2014

[EPS Reunion](#)

Do you have fond memories of your time at the University of Birmingham? As a graduate of one of the nine schools in the College of Engineering & Physical Sciences (EPS), we'd love for you to join us on campus for a reunion, where you can visit your departments, see your old haunts, possibly even chat with some of the academics who taught you. The reunion gives you the chance to step back in time and remember your years at the University.

Time: 10am-5pm

Venue: Edgbaston Campus

Please visit the [website](#) for more information and to secure your place at the Reunion

Wednesday 18 June 2014

[Metallurgy and Materials End of Year Ball](#)

For the first time in many years the School of Metallurgy and Materials is organising an end-of-year ball where staff and students, from Met & Mat courses past and present, have the chance to socialise over an evening of food, drinks and entertainment.

Time: 7-11pm

Venue: Botanical Gardens, Birmingham

For more information and to book your place, [click here](#)

Monday 23 June 2014

[National Women in Engineering Day Celebrations](#)

The first ever National Women in Engineering Day (NWED) is being held on Monday 23 June to celebrate the achievements of women in engineering and science. The EPS Community will be celebrating the day with a variety of exciting activities and events on campus.

Time: Programme to be confirmed

Venue: Edgbaston Campus

For more information please email us at eps-community@contacts.bham.ac.uk

Tuesday 8 July 2014

[Engineering Taster Day](#)

Do you have children or family friends who are currently in Year 11 or Year 12? Why not invite them along to our 'Engineering Taster Day' to see what it's like to study with us. There is a choice of subjects to choose from on the day including Computer Science, Civil Engineering, Electronic, Electrical and Computer Engineering and Nuclear Engineering.

Time: 10am-3.30pm

Venue: Edgbaston Campus

For more information and to register please contact Kat Grover: k.i.grover@bham.ac.uk

University events...

Tuesday 13 May 2014

[Birmingham Heroes Lecture: Roads to War- 1914 Revisited](#)

To mark the centenary anniversary of the start of the Great War, Dr Jonathan Boff, Lecturer in History and Director of the Centre for First World War Studies will explore some of the debates about this fascinating historical problem. Dr Boff will suggest that historians have overlooked a crucial dynamic which proved a cause of conflict, not just in 1914 but throughout the 20th century and right up to the present day. This event is being held in the exclusive RAG Army and Navy Club in London and will feature a drinks reception.

Time: 6.15 - 8.30pm

Venue: The RAG Army and Navy Club, London

Visit the [website](#) for further information

Wednesday 11 June 2014

[Happiness Lecture](#)

This year's Baggs Memorial lecture on the theme of Happiness will be delivered by the comedian, writer, actor, and director, Chris Addison (*1994 BA English*). This event is fully booked but we have reserved a few tickets for alumni. The tickets will be allocated on a first come, first served basis.

Venue: The Great Hall, Edgbaston Campus

Please [email us](#) to reserve your tickets

Saturday 14 June 2014

[Bring it Back to Brum for Alumni Sports Day](#)

Save the date for the 13th Annual University Alumni Sports Day. This year it's looking to be the best yet with a massive 15 events going on across campus. Come along and play with your old team mates, relive memories, compete against current students and become an alumni champion!

Venue: Various, Edgbaston Campus

Visit the [website](#) for further information

Saturday 13 September 2014

[Golden and 50th Anniversary Reunion Lunch](#)

If you graduated in 1964 or before you are invited back to campus on Saturday 13 September to a Golden and 50th Anniversary Reunion Lunch with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham

Venue: To be confirmed, Edgbaston Campus

Visit the [website](#) for more information

Alumni group events...

The University of Birmingham has alumni groups all over the world that organise local events. To join a group and see details of upcoming events please visit the [webpage](#) and select your location.