

UNIVERSITY OF  
BIRMINGHAM

# School of Mechanical Engineering Community

Part of  
THE EPS COMMUNITY



## Spring 2015

### Greetings

As you will see from this newsletter it has been a busy few months in the School of Mechanical Engineering, with the University [launching plans for the state-of-the-art Collaborative Teaching Laboratory](#) and our researchers working with the National Centre for Nanoscience in Beijing to [design the world's thinnest, tunable, lightweight lenses](#). We also recently welcomed Mike Wright, Executive Director of Jaguar Land Rover, to campus to deliver a lecture on [The Automotive Industry: Investing in the Future](#).

Our students have also been incredibly active, with [JUUGS](#) holding many social events including a students v lecturers football match, and [UBRacing](#) busily preparing for IMechE Formula Student 2015. We welcome the [Women in Science and Engineering Society \(WISE\)](#) and I look forward to hearing more about their future activities supporting and promoting women within Science, Technology, Engineering and Maths (STEM).

The School's research agenda continues to excel: according to the Times Higher Education magazine, based on the profile we obtained from the [Research Excellence Framework \(REF\)](#), we rank 6<sup>th</sup> among all the departments in the REF 2014 "Aeronautical, Mechanical, Chemical and Manufacturing Engineering" category.

I would like to wish you all a pleasant Easter and I look forward to updating you with the latest news from the School and our students in the Summer Term.

With best wishes,

**Duc Pham**  
Head of School  
Mechanical Engineering

**P.S.** My warmest thanks go to alumni Dr Jim Henshaw, Nathan Rogers and Jon Whitehouse for delivering excellent industrial synoptic lectures to our BEng class. Our plan for these lectures was mentioned in the Autumn/Winter 2013 issue of this newsletter. A report on the lecture series will be provided in a future issue.

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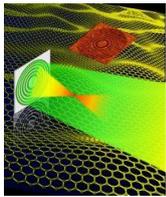
## News from the School of Mechanical Engineering

### University launches plans for Collaborative Teaching Laboratory



The University has launched ambitious new plans for a £40 million state-of-the-art Collaborative Teaching Laboratory (CTL) to facilitate the teaching of science, technology, engineering and maths (STEM) subjects. It will enable collaborative and interdisciplinary working amongst undergraduate and postgraduate taught students, providing a transformational teaching experience to enable them to develop the skills and experience required by employers. [Read more.](#)

### International research partnership develops graphene-based flat lenses



A collaborative team of researchers, led by the University of Birmingham and the National Centre for Nanoscience in Beijing have designed the world's thinnest, tunable, lightweight lenses using graphene material. The original research paper was published in ACS Photonics on 7 January 2015. [Read more.](#)

### James Watt Undergraduate Society (JUGS) update



JUGS have had a busy term with numerous sporting fixtures and joint events with other societies. Their Sport and Media Rep Alex Cossey [tells us more.](#)

### UBRacing update



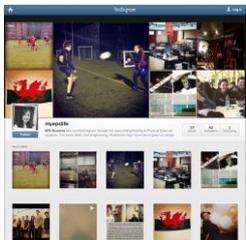
UBRacing have been incredibly busy so far this year with new design developments underway and the chasis in progress. Daisy Partlow and Iestyn Stead [tell us more.](#)

### Welcome to WISE - Women in Science and Engineering Society



The Women in Science and Engineering (WISE) Society are the newest student group to join the EPS Community. They work to provide as many events and opportunities as possible to members across the College of Engineering and Physical Sciences to integrate, form networks and to help inspire the next generation of female scientists and engineers. Annabel Fitzgerald [tells us more.](#)

### Student Instagram Takeover



With the growing popularity of Instagram as a social networking service, the College has recently launched a student-led takeover account. Every two weeks a different student from across the College will be managing the 'MyEPsLife' channel, taking photos and videos of their experiences and highlighting activity across our Schools and the wider University community. Explore the current activity [here.](#)

## The automotive industry is going to be unrecognisable



On Tuesday 24 February 2015 Mike Wright, Executive Director of Jaguar Land Rover, delivered a lecture in the School of Mechanical Engineering on the subject The Automotive Industry: Investing in the Future. He told an audience of students, academics, alumni and business leader that the sector is changing more fundamentally now than at any time since the early days of its inception. [Read more.](#)

## Birmingham says global demand for 'cold' should be taken seriously with launch of new Policy Commission



The University has recently launched a new policy commission entitled 'Doing Cold Smarter'. It will investigate how the growing demand for 'cold' and cooling, which is required to address global challenges of hunger, disease and population growth, can be met without causing environmental ruin. The provision of cold is a vital foundation of modern society - without it medicine, data and the supply and preservation of food would break down. Cooling is also energy intensive; estimates suggest that it consumes up to 14% of Britain's electricity and £5.2 billion each year is spent on energy for cold across the grid and transport. These figures will be significantly higher in warmer countries, while in rapidly developing nations such as China and India investment in cooling is starting to boom. [Read more.](#)

## New cutting-edge robotic techniques in development to assist nuclear waste clean-up



A collaborative EU Horizon 2020 project including the University of Birmingham, National Nuclear Laboratories (NNL), French Alternative Energies and Atomic Energy Commission (CEA), National Centre for Scientific Research (CNRS) and the Autonomous Systems Lab of Technical University of Darmstadt will commence in May 2015 to develop cutting-edge new robotics techniques to assist the future clean-up of legacy nuclear waste. [Read more.](#)

## Don't miss out! Book your place on the EPS Reunion 2015!



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 College of Engineering and Physical Sciences, we would love for you to join us on campus on Saturday 20 June 2015 for a reunion. [Read more.](#)

## Mini chance to make a massive difference



You can make a difference to your University in the time it takes to make a cup of tea.

To mark Micro-Volunteering Day on 15 April there are a whole range of opportunities to support Birmingham; all possible in just ten minutes or less.

These bite-sized tasks can have a big impact: from answering questions on your shopping habits for students' dissertations, to sharing your opinion on our website design or celebrating with the University's newest alumni by sending in your graduation memories. [Email us](#) to learn more.

## Scholarships available for postgraduate study



The University is pleased to announce the launch of the [Distinguished Alumni Scholarship scheme](#). Awards of £2,000 per scholarship will be offered to outstanding alumni wishing to undertake Masters study at the University during 2015. [Read more.](#)

In addition 224 new £10,000 scholarships available for Masters students from under-represented groups are available for 2015 entry through the Birmingham Masters Scholarship Scheme. [Read more.](#)

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## New staff in 2014/15

There have been a number of appointments in the School this term. **Read a summary of our new staff [online here](#).**

## Your School needs you...

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

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

- 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](#).
- **Undergraduate Open Day, 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](#).
- Work experience placements are invaluable for our students, allowing them to learn about the world of work first-hand and apply their knowledge in a real-life setting. If you work in industry and think you could offer a work experience placement to our undergraduate or postgraduate students, please [email us](#).

There are many ways in which you can give a little back, from providing a career profile, to mentoring a student. Please [email us](#) if you would like to get involved and we'll be happy to talk to you.

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## College and School events taking place shortly...

### [EPS Inaugural Lecture Series](#)

For information on upcoming lectures in the EPS Inaugural Lecture Series please [visit our website](#)

#### **Tuesday 9 June 2015**

##### [EPS Societies' Awards](#)

Come and celebrate with our student societies as we recognise their fabulous achievements in 2015/16.

**Time:** 7pm-11pm

**Venue:** Great Hall, Edgbaston Campus

#### **Saturday 20 June 2015**

##### [EPS Alumni Reunion](#)

As a graduate of one of the nine schools in the College of Engineering & Physical Sciences (EPS), you are invited back to campus for a Summer Reunion to get together with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham.

**Time:** 9.30am-6pm

**Venue:** Edgbaston Campus

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

#### **Tuesday 23 June 2015**

##### [National Women in Engineering Day Celebrations](#)

Following the success of last year's first ever National Women in Engineering Day (NWED), this year's event is being held on Tuesday 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](#)

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## University events...

### Saturday 25 April 2015

#### [Fab 'n' Refresh](#)

On Saturday 25th April 2015 the Guild of Students, in association with the Development and Alumni Office, presents Fab 'n' Refresh! Come back onto campus to party the night away with fellow alumni who graduated from 2005 onwards.

**Time:** 10pm-late

**Venue:** Joe's Bar, Guild of Students

### Saturday 13 June 2015

#### [Alumni Sports Day](#)

Save the date for the 14th annual University of Birmingham Sport Alumni Sports Day. This year promises to be bigger and better than ever before with 16 events across 14 different sports. The events will take place on campus, at the Bournbrook and Metchley pitches and the Edgbaston Priory Club, creating a multi-sport festival.

**Time:** 9am-5pm

**Venue:** Various

### Monday 22 June 2015

#### [Baggs Memorial Happiness Lecture 2015](#)

The Baggs Memorial Lecture began in 1976 and the lecture series has seen many distinguished speakers tackle the topic of happiness from their personal viewpoint including Yehudi Menuhin, David Attenborough, Peter Ustinov, Maureen Lipman, David Lodge, Adam Hart Davies, Robert Winston and Sue Lawley. This year the University is pleased to welcome Matthew Parris who worked for the Foreign Office and the Conservative Research Department before serving as MP for West Derbyshire.

**Time:** 6.30pm-8.30pm

**Venue:** Great Hall, Edgbaston Campus

### Saturday 12 September 2015

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

If you graduated in 1965 or before you are invited back to campus on Saturday 12 September to a Golden and 50<sup>th</sup> Anniversary Reunion Lunch with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham.

**Time:** 10.45am-4pm

**Venue:** Edgbaston Campus

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## 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.

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## Do we have the right details for you?

Please visit [your.bham](#) or email [alumnioffice@contacts.bham.ac.uk](mailto:alumnioffice@contacts.bham.ac.uk).

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