

Spring 2014

Greetings,

Another busy term has come to an end in the School of Mechanical Engineering as our students are finishing assignments and dissertations ahead of the Easter break. Our numbers of prospective students and applicants continue to increase thanks to our "University of the Year" accolade and of course to the School's strong league table position. As you will see from this newsletter our academics have also made, and contributed to, significant scientific discoveries. Haider Butt's research into the use of waste products from glass production in optical diffusers; and Athanasios Tsolakis' work in diesel oxidation catalysts and their effects on low temperature pollutants to name a few.

I'd like to take this opportunity to remind you of your invitation to attend the first <u>EPS Reunion</u>. Similar to that of the previous University Annual Alumni Reunion event, we are inviting all former students of the School to return to campus on Saturday 14th June to reminisce with us. It is set to be a very good day and I look forward to seeing many of you there.

With best wishes,

Professor Duc Pham Head of School Mechanical Engineering



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Hurry! Only 24 hours to secure your 'early bird' place at 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 Mechanical Engineering, we'd love for you to join us on campus on Saturday 14 June 2014 for a Reunion. Read more.

10 ways the University of Birmingham has changed the world



Can you help us to celebrate the impact that staff, students, and alumni have had on society?

With eight Nobel Prize winners amongst former staff and students, and world–leading researchers on everything from the Big Bang to Shakespeare, Birmingham research continues to transform lives. The University needs your nominations for a new 'top ten' list of the alumni, staff, and students who have had profound impact through their research. Visit www.birmingham.ac.uk/10ways to cast your vote by Friday 4 April. Winners will be announced in May

New use for an old 'trouble maker'



A 'trouble maker' from a bygone method of glass production could find a new use as an optical diffuser in medical laser treatments, communications systems and household lighting. A form of crystal that was long considered an unwanted and unloved 'stone' in glass making could find practical use as a cheap and efficient optical diffuser, which are used to scatter and soften light for a range of industrial and household applications. Read more.

The Rejuvenation of UK Manufacturing Technology



Shaping a bright future for British manufacturing requires joined up thinking between industry, academia and the government. The growing recognition that the UK cannot solely rely on the financial sector has shifted the focus on to manufacturing as an integral part of a balanced economy. Professor Richard Williams, Head of the College of Engineering and Physical Sciences, talks about the Manufacturing Technology Centre, and its impact on the future of UK manufacturing. Read more.

UBRacing enters global arena



Birmingham's Formula Student racing team found an extra gear last year taking a new approach to development by visiting their counterparts at South China University of Technology and Hefei University of Technology. Hoping to share knowledge and establish new connections between the teams, the visit provided a unique experience for all involved. Read more. You can also view the latest edition of UBRacing's newsletter here.

Prestigious Philip Leverhulme Prize awarded to Dr Haider Butt



Congratulations to Dr Haider Butt who has been awarded the prestigious Philip Leverhulme Prize by the Leverhulme Trust.

This prize has a value of £70,000 and is offered to early stage researchers who have made a significant contribution to their area of study and whose academic career shows great promise.

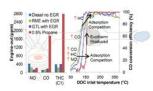
For more information on the Philip Leverhulme Prize, click here.

Professor Sir Martin Sweeting delivers the inaugural EPS Distinguished Lecture



On Wednesday 5th March Professor Sir Martin Sweeting, Director of the Surrey Space Centre, delivered the first EPS Distinguished Lecture. Students Ceri Bradshaw, Rob Brennan-Craddock and Graham Kirkby summarise the event. Read more.

Reduction of Low Temperature Pollutants by Understanding the Exhaust Species Interactions in Diesel Oxidation Catalysts



To meet diesel vehicle emissions legislation, environmental catalysts such as diesel oxidation catalysts, have been widely used and have effectively controlled gaseous carbonaceous emissions. However the even lower exhaust gas temperature associated with modern vehicles stretches catalyst ability to reduce pollutants from vehicles, especially under urban driving conditions where humans are highly exposed to those pollutants. Read more.

Manufacturing Technology Centre gets funding for 3D printing



Chancellor George Osborne has announced funding for 3D printing and aerospace technology. An investment of £30 million will be matched by industry funding and a national centre will be created at the University's Manufacturing Technology Centre. Read more.

Mechanical Engineering Symposium





The School is delighted to invite you to the annual Mechanical Engineering Symposium on Tuesday 27th May. This event is a forum for researchers to share ideas and acts as the perfect opportunity to showcase the research going on in the School. **Read more.**

National Women in Engineering Day



Monday 23 June marks the first National Women in Engineering Day launched by the Women's Engineering Society. It is intended as a day dedicated to raising the profile and celebrating the achievements of women in engineering. We are looking for women with a story to tell. Do you work in science or engineering and would like to get involved? The programme is being developed as we speak so if you would like more information or want to take part please <a href="mailto:e

UBRacing Sponsorship



We have been building racing cars at Birmingham for over 15 years, predating the UK Formula Student competition. Through all the years of competition, the cornerstone of our success has been the sponsors who have provided much needed funding and technical help. If you could consider becoming one of our valued sponsors, you can be sure of a warm welcome into the structure of the team and will be inspired by the camaraderie and team work that is formed amongst the students. For more information see our sponsorship brochure or email Grace Surman who will be happy to help.

New staff in 2013/14

The School of Mechanical Engineering has made a number of excellent appointments 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'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 <a href="mailto:emai
- 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, from providing a career profile, to mentoring a student. **Details can be found online and email us if you would like to get involved.**

Events taking place shortly...

School events

Mechanical Engineering Symposium

27/05/2014

Mechanical & Civil Engineering Building (Y3), University of Birmingham

College events

EPS Inaugural Lecture Series

<u>Professor James Tucker – "Going beyond the Molecule: The Chemistry of Connections"</u> 10/04/2014, 5:15-7:30pm

Lecture Theatre 203, Haworth Building (Y2), University of Birmingham

The lecture will describe and focus on an area of science called supramolecular chemistry, which is often described as "chemistry beyond the molecule". Supramolecular chemistry goes beyond traditional molecular chemistry, which largely focuses on how individual molecules are made, to focus on what a molecule can do once it is made. In particular it concerns how molecules interact with one another and how an understanding of these so-called intermolecular interactions can lead to ordered assemblies, controllable functionality and the mimicry of biological systems.

For more information on other lectures in the EPS Inaugural Lecture Series please visit www.birmingham.ac.uk/eps/inaugural

British Science Festival Event

Details to be confirmed

Keep a look-out here as for more information on how we'll be celebrating the British Science Festival at the university. More information to follow soon!

National Women in Engineering Day

23/06/2014

Details to be confirmed

On 23rd June the EPS Community will be celebrating the achievements of women in the field of engineering as part of the first National Women in Engineering Day (NWED). Keep a look-out here as for more information on our plans for the day!

EPS reunion

14/06/2014

College of Engineering & Physical Sciences, Edgbaston Campus

As a graduate of one of the nine schools in the <u>College of Engineering & Physical Sciences</u> (EPS), you are invited back to campus on 14 June 2014 for a Summer Reunion to get together with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham.

To book your place, please follow the online registration link below or download the appropriate booking form and return by post, fax or email. http://bhamalumni.org/eventregistration

University events

Hong Kong Alumni Gathering

02/04/2014, 7-9pm

Shore 3rd Floor, The L Place, 137-141 Queens's Road, Central Hong Kong

Melbourne Alumni Gathering

10/04/2014, 6:30-9pm

Seasons Botanic Gardens Hotel, Orient East Bar and Restaurant, 348 St Kilda Road, Melbourne VIC 3004

Fab 'n' Refresh

26/04/2014, 10pm

Joe's Bar, Guild of Students, University of Birmingham

Sydney Alumni Gathering

29/04/2014, 7-9pm

The Zeta Br, Level 4, 488 George Street, Hilton, Sydney, Australia

Brisbane Alumni Gathering

Pig 'N' Whistle Riverside, 123 Eagle Street, Brisbane, Australia

Alumni Sports Day

14/06/2014, 9am-5pm

University of Birmingham

Do we have the right details for you?

please visit <u>your.bham</u> or email <u>alumnioffice@contacts.bham.ac.uk</u>.

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