

UNIVERSITY OF  
BIRMINGHAM

# School of Mechanical Engineering Community

Part of  
**THE EPS COMMUNITY**



## Autumn/Winter 2013

### Greetings

Two items in this issue could be of particular interest to you. The first is an article on our car breakdown exercise which students in Year 2 carry out after their exams in June. The second is a report on a visit, also by students in Year 2, to the Mazak European Technology Centre in November.

What is most pertinent in the context of this newsletter is that both events would not have been possible without our alumni who are in very senior positions at Mazak and in the high-profile company that donated the luxury sports car for our students to cut into pieces. I am most grateful for the generous support those alumni gave us.

I must also acknowledge the help received from other former students over the years. Their assistance has come in various forms: offers of industrial placements and graduate employment, sponsorship of projects such as Formula Student, workshop training and Coniston team building, etc.

You might like to know of another very valuable way in which you can contribute to the School.

From the academic year 2014-2015, we will offer a new Year 3 module given entirely by industrial lecturers, each speaking about a case study illustrating what engineers do and how they use the theory they learnt in industrial practice. We are potentially interested in any topics as long as the academic content is of high quality and relevant to mechanical engineering in its broadest sense.

If you have material suitable for a lecture or know a colleague who does, please get in touch.

Wishing you and your family a Happy Festive Season,

Yours sincerely,

**Professor Duc Pham**  
Head of School  
Mechanical Engineering

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### In this issue...

[News from the School](#)

[New staff](#)

[Your School needs you](#)

[Events taking place](#)

## News from the School of Mechanical Engineering

### Global ranking reinforces Birmingham's position as a world-class university

The University of Birmingham has made an impressive 15 place rise to 62nd in this year's QS World University Rankings, cementing its position in the top 100 universities globally and placing it 10th in the UK. **To read more [click here](#).**

### Do cars have Soul?



Head of School Professor Duc Pham outlines the exceptional relationship between Mechanical Engineering students and an iconic luxury sports car manufacturer to argue whether cars really do have soul. **[Read more](#).**

### Engineers Without Borders Birmingham Branch



The EWB Birmingham Society have hit the ground running this year with a full calendar of events including a Cameroon Catalyst project launch. Read about their plans from Branch Vice-President David Streather **[here](#).**

### Mazak hosts Mechanical Engineering students



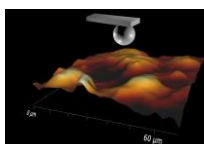
Second year mechanical engineering students were invited to visit the Mazak European Technology Centre in November. The purpose of their visit was to enhance Mazak-student involvement through industry placements, machinery loans and Formula Student support to name a few. Read more from student Daisy Partlow **[here](#).**

### UBRacing Update



UBRacing is in its 17<sup>th</sup> year and the team is stronger than ever. Over 100 students from across the University are joining forces to cover all aspects of the project. Pippi Hornsby, the team's Head of Media, provides a full update **[here](#).**

### Accurately probing cells and tissues



Drs James Andrews (Chemical Engineering), James Bowen (Chemical Engineering), and David Cheneler (Mechanical Engineering) have developed a model and methodology which ensures accurate measurement of the mechanical properties of soft materials. Description of the behaviour of biological tissues, individual cells, and organic polymers has applications in cancer detection, tissue engineering and biomedical research. Their model applies to a wide range of instrumental techniques, from millimetre-scale mechanical testers to nanometre-scale optical tweezers. **[Read more here](#).**

### Engineering: skills or qualifications?



Not a week seems to pass without the national media reporting a shortage of engineers. This is not a criticism; it is in fact an achievement. What was once a very much overlooked issue is now quite rightly receiving the profile and attention it deserves. A strong, sustainable supply of high-quality engineers is essential if the UK is to meet its current and future skills needs for economic growth. Read more of Michael Grove's Director of the University's STEM Education Centre, comments on this debate **[here](#).**

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## New staff in 2013

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...

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.**

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## Events taking place shortly...

### **School events**

#### **28/03/2014: UBRacing 17<sup>th</sup> Car Lunch**

The UBRacing team will launch their 17<sup>th</sup> car and provide an insight into the team. *More details coming soon.*

#### ***EPS Inaugural Lecture Series***

The EPS Inaugural Lecture series celebrates the promotion of leading academics across the College of Engineering and Physical Sciences.

**For more information on other lectures in the EPS Inaugural Lecture Series please visit [www.birmingham.ac.uk/eps/inaugural](http://www.birmingham.ac.uk/eps/inaugural)**

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### **University events**

#### **09/12/2013 [University Carol Service](#)**

**6:15-7:30pm**, on campus

This annual event, organised by University Chaplains and the Department of Music, is a joyful Christmas celebration for staff, students and families.

#### **11/12/2013 [Festive Drinks at the Birmingham Frankfurt Christmas Market](#)**

**6-9pm**, Victoria Square, Birmingham City Centre

Join fellow alumni for a festive drink at the largest authentic German market outside Germany and Austria.

#### **12/12/2013 [USA Christmas Gathering in New York](#)**

**6:30-9:30pm**, Revival, New York, USA

You are invited to the annual alumni holiday party. This is always the busiest get together of the year and we are looking forward to another fun evening.

#### **14/12/2013 [USA Christmas Gathering in California](#)**

**5:30-7:30pm**, California, USA

You and your partner are invited to join fellow alumni at a winter gathering cocktail party with UK University alumni from Birmingham, Nottingham and Sheffield.

#### **27/02/2014 [Leaders of Tomorrow Reception](#)**

**6:30-8pm**, London

Meet with current student recipients of the Access to Birmingham (A2B) scheme and students involved with the Academic Enrichment Programme at this drinks and canapés reception.

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## Do we have the right details for you?

According to our records your current business details are as follows: **Position** at **Organisation Name**. If this is not correct, please visit [your.bham](https://your.bham) or email [alumnioffice@contacts.bham.ac.uk](mailto:alumnioffice@contacts.bham.ac.uk).

**You have received this email from the University of Birmingham because we believe that it is relevant and of interest to you.** If you would like to opt-out of receiving information from your College, School or Department by email, please opt-out by visiting [your.bham](https://your.bham), emailing [alumnioffice@contacts.bham.ac.uk](mailto:alumnioffice@contacts.bham.ac.uk), or telephoning +44 (0)121 414 2773 / 2744 / 4724. In order to further tailor the communication we send, all emails are tracked and processed; further information regarding our use of data, is available by looking at our [data protection statement](#)