# UNIVERSITYOF BIRMINGHAM

# School of Civil Engineering Community



# Winter 2014

# Greetings,

I am often accused of focusing too much on wind related events, however, when they have such spectacular effects as the tornado in Alfreton on the 8th October I cannot help but get excited about the research we undertake in the School. As I write, we are constructing what I believe will be the largest tornado generator outside of North America. Not only will this lead to a better understanding of the events in Alfreton but will give yours truly hours of endless fun and hopefully inspire the next generation of Civil Engineers when they visit the University. This year the School has witnessed not only a significant increase in undergraduate numbers (>40% above target) but a noticeable improvement in the quality of students. Our student population as a whole has witnessed a year on year increase over the last three years which bodes well for the future, indeed if we compare the current population with those in 2012/13 there has been an increase of ~17%. This outstanding performance has been recognised by the University and has resulted in a number of investments, for example, this year we welcome three new Academics and a University funded Research Fellow. More exciting announcements are in the pipeline but until contracts are signed I am sworn to secrecy!

With best wishes,

Professor Mark Sterling Head of School Civil Engineering In this issue...

**News from the School** 

**New staff** 

Your School needs you

**Events taking place** 



# **News from the School of Civil Engineering**

# University to play key role in training of HS2 engineers



The University of Birmingham is to play a key role in the training of engineers working on the HS2 rail link, following the announcement that the National College for High Speed Rail will have its headquarters in the city. Read more.

# High-speed rail college a boost for the region – the hard work starts now



Last week the government announced that the headquarters of the new National College for High Speed Rail will be located in Birmingham, with a satellite site in Doncaster. This is good news for the railway industry and good news for the two regions. It's also good news for the University of Birmingham, which will play a key role in the work of the college through its Centre for Railway Research and Education (BCRRE).

Read more.

# **Engineers Without Borders update**



It's been a busy start to the new academic year for Engineers Without Borders (EWB). President David Streather <u>tells us more</u>.

# A summer at Mott MacDonald



Civil Engineering student Jo Maguire spent some time working with Mott MacDonald this summer. Read about her experience **here**.

# College of Engineering and Physical Sciences at the British Science Festival 2014: Highlights



The College shone at the British Science Festival this year with over 30 contributions to the Festival's main scientific events and workshops and the Young People's Programme. From new robot technology to HS2 and the big bang, our scientists and engineers addressed the big debates and offered interactive activity to engage young people in STEM futures. See more.

# International conference on High Speed Rail



The School of Electronic, Electrical and Systems Engineering (EESE) will be holding an international conference '1964-2064 High Speed Rail: Celebrating Ambition' from Monday 8 to Wednesday 10 December 2014, at the University of Birmingham. This is an important initiative of the Birmingham Centre for Railway Research and Education (BCRRE), intended to cement the long-standing friendship between the staff of the railways of Japan and the UK. Read more.

# Civil Engineers defy the elements to protect crop trade and save Britain millions



Lodging, the term used to describe the flattening effect of high wind speeds and heavy rainfall on trees or crops, has a significant economic impact on the UK crop industry. Research in the School of Civil Engineering seeks to make recommendations for improvements in the agricultural industry to reduce the sometimes devastating effects. Read more.

# 'Mapping the Underworld' research informs new industry standard



The vast network of utility services buried underground is fundamental to the way we live today, however around 4 million holes are dug into UK roads each year resulting in traffic disruption, high costs and wasted man hours. Not only this, inaccurate, incomplete and/or out-of-date information on the existence and location of utility assets poses problems for new construction or rehabilitation works and many projects don't go according to plan. Read more.

# New staff in 2014

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

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.

# **Events taking place shortly...**

# College and School events

# **EPS Inaugural Lecture Series**

Thursday 27 November 2014

Professor Jeremy Wyatt, Professor of Robotics and Artificial Intelligence, School of Computer Science

Robotics is reaching a tipping point. The intelligence and robustness of robots increased hugely in the past fifteen years. This has allowed them to leave the lab and carefully controlled environments like the factory floor and enter our world. In this public lecture, aimed at the non-specialist, Professor Jeremy Wyatt will explain the achievements of intelligent robotics to date. He will also highlight some of the challenges we must meet to bring robots into our everyday lives. Finally, Professor Wyatt will highlight some of the work carried out at Birmingham over the past decade, particularly breakthroughs in robot planning, robot learning and robot manipulation. The lecture should be accessible to people from age 12 up.

Live robot demonstrations will be included during the evening.

Venue: Leonard Deacon Lecture Theatre, Medical School Building, followed by a drinks reception in the Wolfson Common Room, **Edgbaston Campus** 

www.birmingham.ac.uk/university/colleges/eps/events/inaugural-lecture/Jeremy-Wyatt-27-11.aspx

For more information on other lectures in the EPS Inaugural Lecture Series please

visit www.birmingham.ac.uk/eps/inaugural

### Monday 8 - Wednesday 10 December 2014

# International Conference on High Speed Rail - 8th-10th December 2014

2014 marks the 50th anniversary of the first Shinkansen high speed line in Japan. The University of Birmingham is marking this historic occasion by holding an international conference on High Speed Rail

Venue: Edgbaston Campus

www.birmingham.ac.uk/research/activity/railway/events/high-speed-rail-conference.aspx

#### March 2015

### EPS Distinguished Lecture: Prof Dr PE Seeram Ramakrishna

Prof Dr PE Seeram Ramakrishna is the Director of the Center for Nanofibers & Nanotechnology at the National University of Singapore

**Venue:** EPS College, Edgbaston Campus www.birmingham.ac.uk/eps/distinguished-Mar15

### Tuesday 9 June 2015

### **EPS Societies' Awards Night**

Come and celebrate with our student societies as we recognise their fabulous achievements in 2014/15

Venue: The Great Hall, Edgbaston Campus www.birmingham.ac.uk/eps/societies-awards-2015

# 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

Venue: Edgbaston Campus

www.birmingham.ac.uk/epsreunion2015

# **University events**

# 25 November - 3 December 2014

# The Edward Cadbury Lectures 2014

The theme for 2014 is 'Is the New Testament Anti-Jewish?' and will consist of a series of lectures given by Professor Amy-Jill Levine, Vanderbilt University USA.

Venue: Edgbaston Campus

www.birmingham.ac.uk/schools/ptr/departments/theologyandreligion/events/2014/cadbury-2014.aspx

### Thursday 27 November 2014

# Chaplaincy lecture - A Quaker astronomer reflects on the Universe and us

This year's Chaplaincy Lecture will be given by Dame Jocelyn Bell Burnell, a prominent astrophysicist and Quaker.

Venue: Elgar Concert Hall, Bramall Music Building, Edgbaston Campus

www.intranet.birmingham.ac.uk/as/studentservices/chaplaincy/events/public/lecture.aspx

# Monday 8 December 2014

# Festive Drinks at the University Carol Service

Organised by the University Chaplaincy and Department of Music, this is a joyful Christmas celebration for alumni, staff, students and families followed by mince pies and mulled wine in the Rotunda at 7.30pm.

Venue: Great Hall, Aston Webb Building, Edgbaston Campus www.birmingham.ac.uk/alumni/events/items/carolservice.aspx

# Thursday 19 February 2015

# Alumni vs Students vs Staff Quiz, 6.30-9.00pm

Put your general knowledge to the test at an informal quiz in Joe's Bar, Guild of Students.

Venue: Joe's Bar, Guild of Students, Edgbaston Campus

http://www.birmingham.ac.uk/alumni/events/items/Alumni-vs-Students-vs-Staff-Quiz.aspx

# Saturday 12 September 2015

### Golden and 50th Anniversary Reunion

Alumni who graduated in 1965 or before are welcome to join for a special reunion lunch

Venue: Edgbaston Campus

/www.birmingham.ac.uk/alumni/events/items/Golden50th-Anniversary-Reunion---13-September-2014-.aspx

# 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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