UNIVERSITY OF BIRMINGHAM

School of Electronic, Electrical and Systems Engineering Community



Spring 2016

Greetings

As you will see from this newsletter it has been a busy few months in EESE. From launching experiments into space, having Postdoctoral Fellow Sean Elvidge named in Forbe's first "30 Under 30 Europe" listing, the coming of age of the MSc Railway Systems Engineering and Integration programme, and drones re-making history – it's been quite a term.

You will see elsewhere in the newsletter that the New Year saw the start of an exciting new chapter for engineering at the University, with the bringing together of Electronic, Electrical and Systems Engineering, Mechanical Engineering and Civil Engineering into one combined School of Engineering. I believe that the alignment of the three engineering disciplines under one academic roof is a positive step for us all. Whilst there are skills that are core to EESE, we must recognise that most practical engineering is undertaken in a multidisciplinary manner, with various disciplines collaborating to achieve an overall aim. At Birmingham we are committed to producing employable graduates who can offer value to their employers from Day 1. Consequently we feel it is an obvious move to help prepare our students for working life by exposing them to interdisciplinary activities throughout their time with us. At the same time we will ensure they continue to learn the core skills required to be an electrical engineer.

It isn't just in undergraduate teaching where we will see benefits. The formation of the new School has enabled us to redefine and refine our research activities, bringing our world-leading researchers from the three disciplines closer together to deliver excellent research with greater impact.

Our students are going from strength to strength with EESE Soc doing us proud on the sports pitch, organising more social events than ever before and joining forces with the

other societies in the new School of Engineering to ensure all our students have a great time with us. EESE Soc have had a great year and are thoroughly deserving of one of EPS Societies' Awards so please do show your support and nominate them.

Finally, it would be great to see as many of you as possible at the forthcoming Alumni Reunion. Like previous years, we are inviting all of our former students to return to campus on Saturday 18 June to reminisce with friends and find out how the University has changed since your time as a student. It would be lovely to see you there too.

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

Best wishes,

Professor Peter Gardner

Head of Electronic, Electrical and Systems Engineering

School of Engineering

In January our new School of Engineering was launched, aligning the activities of Civil Engineering, Electronic, Electrical and Systems Engineering, and Mechanical Engineering. Engineering is one of the key drivers for economic growth and continues to demand high quality graduates, world-leading research and multi-disciplinary knowledge in order to meet the grand challenges of modern society. This new School will create a multi-disciplinary vibrant environment for outstanding study and research.

Professor Mark Sterling has been appointed Head of the School following a successful period as Head of Civil Engineering. Mark says: "I am delighted to have the opportunity to take forward the new School of Engineering. For me, this represents a chance to build upon our existing strengths in research, teaching and student experience and to develop a more flexible and contemporary educational model based on essential engineering fundamentals."

The University continues to innovate in order to meet these challenges and builds on a strong disciplinary heritage in key areas of engineering. We are proud to have educated generations of engineers; over the past 100 years we have equipped our graduates with expertise in a wide range of fields from brewing to mining, intelligent robotics to automated technologies. Now we must look to the future and prepare our students for what's next.



Collaboration to launch first Malta space mission

The Space Environment and Radio Engineering (SERENE) Group in the School of Engineering are collaborating with the University of Malta to develop a PocketQube picosatellite.

FIND OUT MORE >

30 UNDER30

Forbes names Sean Elvidge in inaugural 30 under 30 Europe

Dr Sean Elvidge, Department of Electronic, Electrical and Systems Engineering, named in Forbes' first ever "30 Under 30 Europe" list in the Science and Healthcare category.

FIND OUT MORE >

Your Electronic, Electrical and Systems Engineering Reunion

Join us on Saturday 18 June for our annual Electronic, Electrical and Systems Engineering Reunion. Whether you graduated five or 50 years ago we invite you to get together with old friends and former classmates to reminisce and celebrate your experiences and friendships from the University of Birmingham. While we do celebrate milestone anniversaries, all alumni are welcome to attend this special Reunion Day regardless of your graduation year.

Take a trip down memory lane with a tour of EESE and explore our beautiful campus to see what has changed, and indeed what has stayed the same, since your time at Birmingham. Why not get a group of friends together? We are happy to help contact those you have lost touch with.

50th and Golden Anniversary tickets cost £45 and include a two-course formal lunch. All other tickets are £42 and include a hot buffet lunch. All bookings made before Friday 22 April 2016 are eligible for a £5 early booking discount.





EPS Societies' Awards 2016

Were you a member of a student society during your time at Birmingham? Or have you been impressed reading about the activities of our **current student societies**? Why not nominate them for this year's Societies' Awards?

These Awards celebrate the lengths our students go to make the University a better place to work and play. Join our celebrations by nominating your society for these Awards. Maybe your former society will win the much coveted *Society of the Year*.



Societies' News

It's been a busy term for our societies! Helen Watson, Chair of <u>EESE Soc</u>, and the <u>WISE</u> committee tell us about their activities over the past few months, from industrial events to sporting competitions and introducing their new committees. This term we also welcome four new societies to our community: <u>Games</u>

<u>Development</u>, <u>SATNAV</u>, <u>oSTEM</u> and <u>Drone Soc</u> which formed just two months ago from EESE.

The College of Engineering and Physics Sciences is home to 24 student societies. Each does fantastic work to promote employment opportunities, industrial visits, guest speakers and, of course, social events.

News Round-Up

There have been a number of appointments in the School over the past few months. Read a summary of our new staff **here**.

The newly formed Space Environment and Radio Engineering (SERENE) group at the University of Birmingham has achieved its <u>first sub-orbital rocket flight</u>. An experimental inflatable antenna was launched as part of this year's REXUS (Rocket Experiments for University Students) programme.

An article by two Birmingham academics on the subject of <u>broadband near-zero index</u> <u>metamaterials</u> has been recognised by the editors of the IOP Science Journal of Optics as a Highlight of 2015.

In December the Centre for Railway Research and Education hosted a <u>21st anniversary</u> <u>celebration</u> for its successful MSc Railway Systems Engineering and Integration programme.

Professor Bob Stone explains how <u>drones are helping Virtual Heritage experts</u> make – or rather re-make – history.

The University and <u>SMRT Institute</u>, Singapore have signed a Memorandum of Understanding to formalise a partnership in education collaboration in railway research and education.

The Birmingham Energy Institute welcomed representatives from businesses and universities across Brazil to explore future partnerships that could see **Brazilian cities** testing innovative technology.

Professor Dave Charlton, Spokesperson for the ATLAS Collaboration at CERN, delivered the latest **EPS Distinguished Lecture on the future of the world's largest scientific instrument** and the engineering involved.



Micro-Volunteering Day, 15 April

To mark international Micro-Volunteering Day on 15 April there's a whole range of opportunities to support Birmingham – all in fifteen minutes or less.

These bite-sized tasks can have a big impact – from offering advice to students, to sharing your opinion on our website design or celebrating with the University's newest alumni by sending in your graduation memories. In EESE we particularly want to hear what you've been up to since you left the University and how your careers have progressed so we can share your stories with our current students.

FIND OUT MORE >



Could you mentor a student?

EESE is seeking mentors to work with current undergraduates and share your knowledge, skills and experiences to help guide students as they start their careers. Whether you are a new graduate or senior engineer, based in the UK or overseas, your expertise are invaluable to our students.

Mentoring is about more than giving advice; it's about motivating, empowering and helping the other person understand themselves and their aims – and how they can get there. Get in touch to find out more, we would love to hear from you.

EMAIL US >

Events

EPS Inaugural Lecture Series

For information on upcoming lectures in the EPS Inaugural Lecture Series please visit our **website**.

Friday 6 May

Mathematics in Railway Industry

Join the Birmingham Centre for Railway Research and Education for this free workshop on mathematics in the railway sector, including a technical visit to the newly refurbished Birmingham New Street Station.

Time: 9:30am-6pm

Venue: Gisbert Kapp Building, Edgbaston Campus

Thursday 28 April

Electronic, Electrical and Systems Engineering Research and Project Open Day

EESE's annual event where students and staff showcase internationally leading research within the Department. Final year MEng and BEng students will be presenting the results of their projects. If you are seeking to recruit students for graduate or placement positions you are welcome to approach them during the morning poster session (between 10:30am-1pm) to talk about the opportunities you have.

Time: 10:30am-3pm

Venue: Gisbert Kapp Building, Edgbaston Campus

Friday 13 May

Alumni Reception in Singapore with the Vice-Chancellor

Join the Vice-Chancellor, Professor Sir David Eastwood, for an alumni reception in Singapore.

Time: 6:30pm-8:30pm

Venue: The Ritz-Carlton, Millenia Singapore

Tuesday 17 May

Birmingham Heroes Lecture: Unlocking the immune system

In the fifth Birmingham Heroes lecture, Professor Gary Middleton, Professor of Medical Oncology at the University's Institute of Immunology and Immunotherapy, will present the research and work being undertaken by the Cancer Immunology and Immunotherapy Centre at Birmingham, and how they are developing treatments to protect, harness and enhance the immune system's response to cancer.

Time: 6:45pm-8:45pm

Venue: 10-11 Carlton House Terrace, London

Wednesday 8 June 2016

EPS Societies' Awards

Celebrate with your student society as we recognise their extraordinary achievements with a gala, black-tie evening.

Time: 7pm-11pm

Venue: Edgbaston Campus

Saturday 18 June 2016

EPS Alumni Reunion

As a graduate of one of the nine schools in the College of Engineering & Physical Sciences, 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

Thursday 23 June London

Professional Network 2016

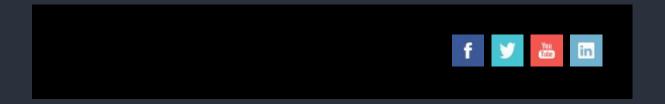
This popular network is the perfect opportunity to enhance your portfolio of contacts and to meet alumni working in related professions, whilst enjoying wine and canapes.

Time: 6:30pm-8:30pm

Venue: The Royal Academy of Arts, London

Global Alumni Gatherings

The University of Birmingham has alumni groups all over the world organising local events. A full listing of international events is available on our <u>website</u>. To join a group and see details of upcoming please visit the <u>webpage</u> and select your location



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