UNIVERSITYOF BIRMINGHAM

School of Electronic, Electrical and Computer Engineering Community



Summer 2014

Dear First Name

This year's graduation ceremony was, as ever, a joyous occasion, and it was my great privilege to participate in it as the announcing officer. This put me in the best possible position to see the graduands one by one as they proudly stepped up to shake hands with the Pro-Vice Chancellor in celebration of their achievements and made the transition from students to alumni. It is a wonderful time of year, a time to celebrate all the hard work our students have put in over the last three, or four (maybe even more) years of their respective degrees.

As the Head of School I must always keep one eye on the current state of the School and one eye on the future. We want to consolidate and improve our reputation both in the UK and abroad, and to ensure that as a School we play to our considerable research strengths which are aligned to challenges in the outside world. The School has key strengths in the areas of Electronic Engineering, Electrical Engineering and Systems Engineering. The systems aspect includes railway, energy, communications and remote sensing systems, as well as interactive computer systems. We are restructuring our research groups around these key strengths. To reflect the breadth of this strategic vision we have decided to change the name of the school to the School of Electronic, Electrical, and Systems Engineering, with effect from 1st October 2014.

This tangible change reflects our commitment to continuous improvement and to stay at the very forefront of teaching and research. If you wish to learn more about the strategic aims of the School and the rationale behind the change of name, you can visit our<u>dedicated web-page</u> on the School website or email eeseoct2014@contacts.bham.ac.uk if you have any questions.

As you will see from this newsletter, our academics have also been busy — not only with marking hundreds of exam papers, but also with their own research. It has been particularly pleasing to see some of our most recently appointed academic staff continuing to build their research portfolios and winning some significant grants. These include a prestigious British Council Global Innovation Initiative (GII) grant led by Dr Mike Antoniou in collaboration with Ohio State, University, Beijing Institute of Technology, Durham University and World Access for the Blind. The submission, entitled 'Seeing with Sound: Developing an Echolocation Device based on sensing principles derived from Human Users', was one of only 12 selected in the UK competition out of over 100 applications. Other successes for recently appointed staff include EPSRC first grant scheme awards for Dr Pietro Tricoli and Dr Marina Gashinova. Pietro's project, entitled "A New Generation of Modular Multilevel Converters Integrating Energy Storage Devices for Dual-Voltage Railway" fits firmly within the growth strategy of the Birmingham Centre for Rail

In this issue...

News from the School

New staff

Your School needs you

Events taking place





Research and Education. Marina's project, entitled "THz imaging for development of new generation of Automotive Sensors" is one of several that she and the rest of the Wireless Communications and Remote Sensing group have won in this area. It focuses on her particular expertise in imaging, and it is helping us to establish a strong presence in the new and promising field of low THz systems.

Other recent successes include the <u>HIT Team being awarded an exciting new research contract from BAE Systems</u>.

It has been a busy time in the School and across the College, with a number of 'firsts', including the first annual EPS Reunion, which took place on 14 June with over 170 alumni in attendance. I was particularly pleased to see that the number of alumni attending in EECE was the largest of any school in the college. It was a great pleasure chatting to our alumni, reminiscing over past experiences and former staff and discussing issues and developments in education and engineering. We also hosted a panel event, 'Engineering a sustainable future', in addition to a number of other activities in recognition of the first ever National Women in Engineering Day, celebrating women's contribution to engineering and science professions.

Lastly, but certainly not least, our first <u>EPS Societies' Awards</u> was held on 6 June, celebrating the fantastic achievements of our student body in delivering an exciting programme of events, projects and challenges over the course of the year as part of their involvement in our School societies. With a live student band providing entertainment and 10 highly sought-after award categories, it really was a night to remember

As we close the door on another successful academic year and look towards the opportunities in 2014-15, I would like to challenge you to consider how you might give your time to make a positive impact on the life of a student in the School. Would you be able to provide a career profile, be available for students to talk to you about your industry, mentor a student or offer to host a placement in your organisation? There are so many ways in which you can help our students, and our dedicated College Alumni Relations team would be only too happy to discuss this in more detail with you. If you're interested in volunteering, please get in touch at eps-community@contacts.bham.ac.uk

I wish you a very pleasant summer,

Dr Peter GardnerHead of School Electronic, Electrical and Computer Engineering

News from the School of Electronic, Electrical and Computer Engineering

Congratulations Class of 2014!



On behalf of all academic and support staff in the School of Electronic, Electrical and Computer Engineering, we'd like to say a huge congratulations to all our new graduates who received their degree certifications earlier in July after lots of hard work and dedication! Read more.

'A great day was had by all'



On Saturday 14 June 2014 we welcomed alumni from across the College of Engineering and Physical Sciences back to the University for a special day of celebrations and activities with fellow classmates and staff. Over 170 alumni and guests from as far back as 1946 up to our 2013 graduates attended this annual College Reunion, which was open to all graduating years for the very first time. Read about the day and access photographs here.



Birmingham has been shortlisted as a potential home of the National College for High Speed Rail, Skills and Enterprise. The Birmingham Centre for Railway Research and Education played an important part of the Birmingham bid to develop the elite High Speed College. Read more.

Global impact in Engineering and Physical Sciences: Leading the way in computer and electrical engineering



Scientists at Birmingham have partnered with the University of Science and Technology China on a number of transformational research projects looking at tracking consumer behaviour and pioneering smartphone capability to mapping underground energy systems and healthcare technology through Computer Science and Electronic Engineering. Read more.

BAE Systems Award Exciting New Research Contract to EECE's HIT Team



EECE's Human Interface Technologies Team is one of only three UK academic institutions to have been selected to take part in a challenging 2-year research project instigated by BAE Systems, addressing Human Factors issues of advanced interactive technologies. Read more.

EPS Societies' Awards



On Friday 6 June 2014 the College of Engineering and Physical Sciences celebrated the achievements of our student societies with the first ever EPS Societies' Awards. We have a strong tradition of outstanding educational success; from public astronomy events with AstroSoc to designing Formula Student cars with UBRacing, the societies do astonishing work not just in academia but also to promote careers opportunities, industrial visits and, of course, social events. Organising committee member and Mechanical Engineering student Daisy Partlow tells us about the night here. Winners, nominations and photographs are also available on our website.

PhD student receives FUNcube Dongle SDR



Congratulations to Graham Kirkby, PhD student in the Space Environment and Radio Engineering Group, who has won the prize for the Best Student Presentation at the 2014 UK CubeSat Forum Workshop. Read more.

Birmingham engineers compete at the IMechE Railway Challenge 2014



For the third year in succession the Birmingham Centre for Railway Research and Education have entered a vehicle in the IMechE Railway Challenge. With the only hydrogen-powered engine in the competition, the team had an excellent experience and went away enthused continuing the railway project. Read more.

National Women in Engineering Day celebrated at the University



In celebration of the UK's first ever National Women in Engineering Day on 23 June 2014, the College of Engineering and Physical Sciences organised a programme of events and activities, including a panel event discussing 'Engineering a sustainable future' with leading female engineers and academics. View interviews and videos from the day here.

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

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EPS Inaugural Lecture Series

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

Monday 22 - Saturday 27 September 2014

Trusting Atoms: The Last Trials of Ludwig Boltzmann

Trusting Atoms: The Last Trials of Ludwig Boltzmann brings to life the passion, drama and suffering of one long-forgotten scientist of the 19th Century. Join Ludwig Boltzmann in his battle to save the dying theory of atoms, his equation and so his career in a hostile scientific environment.

Venue: Cadbury Room, St Francis Hall, Edgbaston Campus

http://www.birmingham.ac.uk/university/colleges/eps/events/Trusting-Atoms.aspx

Thursday 6 November 2014

EPS Distinguished Lecture: Professor Paul Cannon

Minor explosive eruptions of energy from the Sun that cause small solar storms on Earth are relatively common events. In contrast, extremely large events (superstorms) only occur very occasionally – perhaps once every century or two. Since the start of the space age, there has been no true solar-superstorm, but there have been a number of large storms and some of these have caused major technological damage, for example the partial collapse of the Canadian electricity grid in 1989

Venue: EPS College, Edgbaston Campus

www.birmingham.ac.uk/eps/distinguished-Nov14

Monday 8 - Wednesday 10 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

highspeedrail64@contacts.bham.ac.uk

Wednesday 10 December 2014

EPS Christmas Lecture - Professor Jim Al-Khalili OBE

Please join us to hear from Professor Jim Al-Khalili, Presenter of The Life Scientific on Radio 4, British scientist, author and broadcaster as he delivers the inaugural EPS Christmas Lecture

Venue: The Great Hall, Edgbaston Campus

www.birmingham.ac.uk/eps/christmaslecture

March 2015

EPS Distinguished Lecture: Prof Dr PE Seeram Ramakrishna

Prof Dr PE Seeram Ramakrishna is the Director of the Centre 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

I Inivarcity avante

Saturday 6 - Thursday 11 September 2014

British Science Festival 2014

The British Science Festival celebrates all things scientific and will be hosted by the University of Birmingham in September 2014. Organised by the British Science Association, the event offers something for everyone

Venue: Birmingham City Centre and Edgbaston Campus

http://www.birmingham.ac.uk/university/british-science-festival/index.aspx

Thursday 11 September 2014

Alumni Reception at the British Science Festival

Join fellow alumni for drinks and nibbles on the final day of the British Science Festival.

Venue: Marquee, Chancellors Court, University of Birmingham

http://www.birmingham.ac.uk/alumni/events/items/BSF-Alumni.aspx

Saturday 13 September 2014

GGAA 2014 Forum & AGM

Join members of the Guild of Graduates and Alumni Association (GGAA) for their 2014 Forum and AGM. This year's speaker is the Rt Hon Ann Widdecombe.

Venue: Edgbaston Campus

http://www.birmingham.ac.uk/alumni/events/items/GGAA-2014-Forum--AGM.aspx

Saturday 13 September 2014

Golden and 50th Anniversary Reunion

Alumni who graduated in 1964 or before are welcome to join for a special reunion lunch

Venue: Edgbaston Campus

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

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 or email 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, emailing 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