UNIVERSITYOF BIRMINGHAM

# Department of Mechanical Engineering Community



## Spring 2017

Welcome to our latest Mechanical Engineering Alumni newsletter.

As you will know, Mechanical Engineering is a diverse subject and I think it can be best summed up with the old Institution of Mechanical Engineers slogan - "Nothing moves without Mechanical Engineers". Whether it is an aircraft, car, train, satellite or an artificial knee replacement, Mechanical Engineering plays an important role.

The research in the Department of Mechanical Engineering also reflects the breadth of the subject. Holograms, machining of materials for aerospace, robotics, mechanical properties of human tissue, nanotechnology, biofuels, engines and tribology are just a few of the research areas. Why not check out the <u>staff profiles</u> to find out more.

Teaching in the later years of our Mechanical Engineering degree programmes also reflects the research interests in the Department, culminating with the final year MEng module Synoptic Mechanical Engineering. The examination paper tests the knowledge and understanding of the students across all the subjects of Mechanical Engineering, helping prepare the students for employment. The employment destinations of our students also cover the various areas of Mechanical Engineering, with examples of recent destinations including Airbus (Aerospace), DePuy Synthes (Medical Devices), Jaguar Land Rover (Automotive), McLaren Racing (Automotive), National Grid (Energy) and Rolls-Royce (Aerospace).

In this newsletter we cover everything from nanostructures to reunions. It would be great to see you back on campus for the Alumni Reunion on Saturday 30 September to reminisce with friends and find out how the University has changed since your time as a student. We also have a special event on Saturday 17 June to celebrate 20 years of UBRacing. And don't forget to nominate our many student groups for an EPS Societies' Award!

As ever, we are always pleased to hear from you about your news and experiences. If you would like to get involved, for example through providing career profiles, mentoring students, offering work placements or contributing to outreach events, please get in touch.

With best wishes

Professor Dunacan Shepherd Head of Department



# Reconfigurable optical assembly of nanostructures

We are shining new light on the development of optical devices by using powerful lasers to produce erasable and rewritable holograms in, literally, nanoseconds

FIND OUT MORE >



# UBRacing's 20th Anniversary

Team members and motor sport enthusiasts are invited to join UBRacing in marking their 20th birthday. Join us for an afternoon of celebrations, grid walk (where you can display your car too!) take a peek at the 2017 car and a few surprises!

FIND OUT MORE >

# WE ARE BIRMINGHAM

Our 300,000 alumni all share one thing in common: the University of Birmingham. From recent graduates to industry experts, aspiring leaders to inspirational movers and shakers, Birmingham alumni are making important things happen. Join the "We Are Birmingham" project and share your story with our students. You can inspire our students and offer an insight into the wealth of opportunities available to them. Plus, anyone who submits a profile before 1 July will be automatically entered into a draw to win a BrumBag full of University merchandise. Share your Birmingham story and help shape their future.

#### SUBMIT YOUR WE ARE BIRMINGHAM PROFILE >



## Societies News

There are now seven student societies affiliated with Mechanical Engineering: MechSoc (formerly JUGS), UBRacing, UBRobotics, Engineering Rubgy, WISE, oSTEM and SATNAV. It's been a busy year with many events, careers activities, sporting competitions and new committees, so there's plenty to update you on.

The College of Engineering and



# EPS Societies' Awards 2017

Were you a member of a society while at Birmingham? Wish you had been? Or have you been impressed reading about the activities of our **current student groups**? Why not nominate them for a Societies' Award?

These Awards celebrate the lengths to which our students go to make the

Physics Sciences is home to 25 student societies. Each does fantastic work to promote employment opportunities, industrial visits, guest speakers and, of course, social events.

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University a better place to work and play. Join our celebrations by nominating your society. Maybe your former society will win the much coveted Society of the Year trophy. They need your help!

NOMINATE >

# University Reunion 2017

The Alumni Reunion 2017 provides a great opportunity to rediscover what made Birmingham "home" for you and to renew your lifelong connection to this special place. It's a fantastic time to reconnect with friends and classmates and see how Birmingham has grown into the university it is today. Join us for a day of reunion celebrations including campus tours, stress-free lectures, a chance to visit some of the latest additions to campus such as the new Library, and a plenty of opportunity to reminisce. There will also be time to visit us in Mechanical Engineering to find out how we have changed since you were last with us and to meet some of our current academics and students.



#### **FIND OUT MORE>**

# News Round-Up

The <u>Arkwright Scholarships Trust</u> has conducted its annual award of prestigious Scholarships to future leaders of the engineering profession. The University of Birmingham will provide three scholarships to year 12 students.

Carolina E. Lavecchia, a Marie Curie Early Stage Researcher in the School of Engineering, recently collaborated with a **world-leading computational modelling** research group at the University of Melbourne thanks to a fully funded scholarship, as part of the University of Birmingham's membership of Universitas21.

Osman Kent, alumnus and serial entrepreneur, delivered the latest EPS Distinguished Lecture entitled "Success gives you the credibility to talk about your failures".

#### We'd like to hear your feedback on our academic provision for engineering students.

The School of Engineering Teaching and Learning Centre is considering the skills that we believe should guide the development of our academic provision for students. We have developed a questionnaire for all stakeholders, including alumni, to effect the necessary curriculum change and deliver quality graduates. Against 17 questions, each describing a specific skill, we ask you "to what level did we equip you with this skill?". This is for us to ascertain how much emphasis we place in our programmes on developing this skill in relation to others. Please help up shape our curriculum by completing our **questionnaire**.

### **Events**

#### Monday 15 - Wednesday 17 May

#### **Pint of Science**

Leading University of Birmingham academics will be speaking about their cutting-edge research. We aim to bring some of the most brilliant scientists to discuss their latest findings with you. You don't have to have any previous scientific knowledge or training, and this is your chance to meet the people responsible for the future of science.

Venue: Various locations across Birmingham City Centre

#### Wednesday 17 May

#### Birmingham - Fraunhofer Joint Research Platform Launch

The University of Birmingham is set to host the Birmingham – Fraunhofer Joint Research Platform Launch to establish closer ties with cutting-edge renewable energy technology in the UK and Europe.

**Time:** 9am-7:30pm

Venue: Elgar Concert Hall, University of Birmingham

#### Wednesday 7 June

#### **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 17 June

#### **UBRacing 20th Anniversary**

Team members past and present, and motor sport enthusiasts are invited to join UBRacing in marking their 20th birthday and two decades of Formula Student at Birmingham. Join us for an afternoon of celebrations, take a peek at the 2017 car and be prepared for a few surprises.

**Time:** 1:30-6pm

Venue: Edgbaston Campus

#### Saturday 17 June

#### Geotechnical Engineering 60th Anniversary Reunion

We are delighted to announce that the Geotechnical Engineering masters degree programmes are celebrating their 60th year. To celebrate this notable achievement the University will host Geo60, a celebration and reunion of the programme to which all alumni and interested persons are invited to attend.

Time: 9:30am-5pm

Venue: Edgbaston Campus

#### Wednesday 28 June

#### **Mathematics Taster Day**

The School of Mathematics holds a Mathematics Taster Day for Year 12 pupils in the second half of the summer term. As well as information on studying mathematics at Birmingham, the day will include two sample lectures, a tour of campus and an interactive mathematics session.

**Time:** 9:30am-3:30pm

Venue: Edgbaston Campus

#### Tuesday 4 July

#### **Engineering Taster Day**

Our Engineering Taster Day is for Year 12 pupils who are thinking about applying to university to study an engineering degree. The day will consist of an introductory talk, a tour of campus, a subject fair and an interactive workshop.

**Time:** 9:30am-3:30pm

Venue: Edgbaston Campus

#### Sunday 16 - Thursday 20 July

#### **IUPAP International Conference on Women in Physics**

The International Union of Pure and Applied Physics (IUPAP) is delighted to announce that the 6th conference in this series will be hosted by Birmingham, UK. Organised in partnership with the Institute of Physics (IOP) and the Universities of Birmingham, Nottingham and Warwick, the Conference will foster the participation of women in physics and increase diversity in the field.

Venue: Edgbaston Campus

#### Wednesday 20 September

#### **London Mathematical Society Popular Lectures**

We are proud to begin the 2017/18 Birmingham Popular Mathematics Lecture series with the London Mathematical Society Popular Lectures, which are suitable for all who have an interest in Mathematics, and present exciting topics in mathematics and its applications. In this first event of the new academic year, David Tong (University of Cambridge) and Jason Lotay (University College London) will be speaking.

**Time:** 6:30-9pm

Venue: Elgar Concert Hall, University of Birmingham

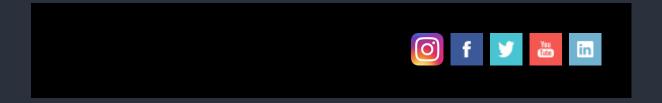
#### Saturday 30 September

#### University of Birmingham Alumni Reunion

Join us for the big Anniversary Reunion on Saturday 30 September 2017. Whether you're celebrating your 50th anniversary or your 1st anniversary, come back to the Edgbaston campus and celebrate your University with staff, students and fellow alumni.

Time: 10am-5pm

Venue: Edgbaston Campus



You are in control of your data. We want to stay in touch with you and keep your information in accordance with your wishes. You will be kept updated with news from our campus, including research, educational activities and courses, events, alumni activities, and opportunities to support our fundraising. Depending on your preferences, you will receive communications via post, email, telephone and social media. We would like to ensure that our interactions with you are appropriate and cost-effective. We will pay attention to your responses (including e-tracking) and, from time to time, may use your data for profiling, targeting, and research purposes. Your information will be <a href="held securely">held securely</a> by the University of Birmingham and will only be made available to our academic & administrative departments, recognised alumni groups, and trusted agents acting on behalf of the University. Information on how your data is held and used is set out in our <a href="Data">Data</a> <a href="Protection Statement">Protection Statement</a>. If you wish to opt-out of any contact or have any questions about your personal data, please <a href="contact the alumni office">contact the alumni office</a>. For reference, our Inland Revenue Charities reference number is X7237.