

## Investments in Teaching Quality



Substantial investments have been made in the School's teaching estate, resulting in a complete upgrade of the Hudson Beare teaching block, renovation of Lecture Theatre 2 (which has B listed status), expansion and development of the Mechanical Engineering teaching laboratories and the computer teaching labs in Fleeming Jenkin.

The renovation of the classrooms and Lecture Theatre included the installation of state-of-the-art audio visual facilities in every room, supporting new innovations in our teaching practices.

The Crush Hall has more than doubled its size and capacity and has been transformed into a light and airy space, through the installation of large floor to ceiling windows and the creation of the School's first cafeteria, "The Eng Inn", serving speciality coffee, tea and light lunches and snacks. It is already clear to see how much more this space is valued by students, staff and visitors.

### Lifetime Achievement Award for Professor Mike Forde



Professor Mike Forde, FEng, FRSE was presented with a Lifetime Achievement Award at the Conference Banquet in Belfast City Hall on September 2nd by Pro-Vice Chancellor Professor James McElney, on behalf of Queen's University Belfast and the Concrete Solutions-2014 Conference.

Professor Forde's Lifetime Achievement Award was for sustained original contribution to the field of non-destructive testing of civil infrastructure.



### Professor Alan Murray awarded Principal Fellowship of the HEA

The Higher Education Academy (HEA) has conferred its highest status – that of Principal Fellow – on Professor Alan Murray. The HEA is the UK's national, independent and government-funded organisation that contributes to the professionalisation of University teaching.

This award recognises Professor Murray's long, passionate and ongoing commitment to teaching, learning and students. It recognises a wide range of contributions, including: "front-of-house" teaching within the University and strategic leadership in student education in the University.



### Professor Stefano Brandani Granted "Cavaliere dell'Ordine della Stella d'Italia"

The Ordine della Stella d'Italia ("Order of the Star of Italy") represents a particular honour for Italians abroad who have achieved special merits in the promotion of friendly relations and cooperation between Italy and other countries.

The order is bestowed by decree of the President of the Republic, on the recommendation of the Minister of Foreign Affairs, and was conferred by the Consul General of Italy to Scotland on Italy's Republic Day (June 2nd) to Professor Brandani for his contribution to scientific and technological research.

## You Said We Listened

As part of the University of Edinburgh's 'You Said, We Listened' campaign, a series of posters have appeared on campus demonstrating how we use the comments of our students to improve their University experience. The posters highlight a number of improvements made in response to student comments over the last year, including:

- an increase in student access to academic staff through regular 'surgery hours' and weekly project meetings;
- the introduction of mid-semester course feedback, facilitating changes in course delivery during the same academic year;
- the adoption of a minimum standard for coursework feedback; and
- improvements in social and study space in the School with the opening of the Eng Inn cafe.

## FloWave wins Award

FloWave has secured the 'Best Innovation' prize at the 2014 Scottish Renewables Green Energy Awards. Our world-leading ocean energy test facility – which can replicate both waves and tides in its unique 25 metre circular pool – landed the prestigious innovation award at a ceremony held in Edinburgh on November 27th.

Congratulating FloWave, University of Edinburgh Principal and Vice-Chancellor Professor Sir Timothy O'Shea said: "Congratulations to the FloWave team on their well-deserved win. This is a worthy accolade befitting a world-class facility, and we look forward to seeing FloWave build on its success in the months and years ahead."



## The First Engineering Networking Dinner

The first Engineering Networking Dinner was held on the evening of October 1st in the spectacular surroundings of the Playfair Library in Old College. Organised entirely by a committee of students from the Chemical Engineering Society, sponsors included Petrofac, ConocoPhillips, Safetec, BP, Diageo, EnQuest and ExxonMobil.

Nearly 150 students and industrial attendees enjoyed a champagne reception and dinner. To round off the evening, Chemical Engineering alumnus Tom Pringle gave an inspiring after dinner talk on how to communicate engineering ideas. The organising committee were congratulated on a very successful evening, which is set to become an annual event, allowing students and industrial guests to meet in an informal setting.

## Student Awards

Our students have had another very successful year winning prizes in various categories including:

**Alistair Bartlett awarded the 2014 Student Scholar Award:** Alastair Bartlett, a 2014 MEng Graduate in Structural and Fire Safety, was awarded the 2014 Student Scholar Award from the Educational and Scientific Foundation of the Society of Fire Protection Engineers (SFPE). The award was made for Alastair's MEng Thesis, entitled "Charring Rates for Cross Laminated Timber under Standard and Non-Standard Heating Scenarios," which was supervised by Professor Luke Bisby and Dr Rory Hadden.

**Students win inaugural TRADA design competition:** Four of our Civil and Environmental Engineering students have won the first Timber Research and Development Association (TRADA) national competition, for their design of a landmark building to promote cycling in the city of Sheffield. Hannah McHugh, Nicola Wilson, Rory Gibson and Katharine Davis came out on top in the inaugural contest. The competition was part of the students' third-year course "Conceptual Design for Civil Engineers 3".

**PhD Student, Di Wu, Wins Dstl Prize:** Di Wu, a PhD student at the School of Engineering has won the coveted Dstl prize on spectral deconvolution. Di, who is researching compressed sensing and sparse representations in the University Defence Research Collaboration, won the competition as he recognised the components present in the chemical database and also managed to identify the unknown substances which were not listed in the database.

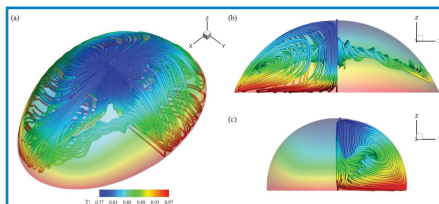
**PhD Student, Atif Syed, wins Innovation Cup:** Atif Syed, a PhD student at Edinburgh, has won the Innovation Cup with his business idea NanJect in June 2014. The Innovation Cup is a business pitching competition for researchers, students, and graduates of the University of Edinburgh. It's open to research or technology based business ideas or young business ventures. Out of the 6 finalists Atif was chosen as the winner of the cup, and received a prize of £5,000. NanJect is a novel pharmaceutical patch which uses nano-needles to deliver drugs into the bloodstream. Atif synthesised the nano-needles at the Scottish Microelectronics Centre. At the moment the target application for NanJect is insulin delivery for diabetic patients.



Hannah McHugh, Katherine Davis, Nicola Wilson and Rory Gibson with Velocity sponsor Vastern Timber  
Photograph by permission of TRADA

## Researcher Wins ARCHER Image Competition

Dr Pedro J Sáenz (supervised by Dr Prashant Valluri and Professor Khellil Sefiane) of the Institute for Materials and Processes within the School of Engineering, has won the ARCHER Image Competition in November. The simulation work in the Complex Fluids and Multiphase Flows Group is also supported by the ARCHER eCSE team. ARCHER is the latest UK National Supercomputing Service, located in Edinburgh.



Streamlines illustrating the temperature distribution and emergence of azimuthal currents within the flow of an irregular 3D liquid droplet undergoing phase change.

**Congratulations to Professor Alistair Borthwick who was recently elected a Fellow of the Royal Academy of Engineering as an authority on environmental fluid mechanics, in particular for his contributions to computational hydraulics.**

**Dr Adam A. Stokes from the Scottish Microelectronics Centre has been appointed to the Royal Society of Edinburgh's Young Academy of Scotland. Adam specialises in bio-inspired engineering, robotics, microfluidics, metamaterials, and micro and nano-fabrication.**

## Arkwright Engineering Scholarship

The Arkwright Scholarships Trust (<http://www.arkwright.org.uk/>) has made its largest ever award of Scholarships (410). Director of Teaching, Stephen Warrington presented Charlie Harrison with her certificate (as the Schools Arkwright Engineering Scholar for 2014/15) at the 2014 ceremony in Glasgow.



These Scholarships act as a beacon to the most talented school STEM (Science, Technology, Engineering and Maths) students and help to ensure that high-potential young people stay engaged in the STEM careers pipeline.

## Alumni News

**Holger Claussen (PhD, 2004) wins World Technology Award**

Dr Holger Claussen has won the World Technology Award in Communications Technology. Dr Claussen graduated with a PhD degree in Signal Processing for Digital Communications from the School in 2004 and is now the leader of Small Cells Research at Bell Labs, Alcatel-Lucent.