

**this issue**President's report **P.1**Recruitment and Admissions Forum 2013 **P.2**EPC enrolments survey 2013 **P.2**House of Lords Inquiry on scientific  
infrastructure **P.2**Visa regulations update **P.3**Perkins Review **P.3**Future events and current studies **P.4****EPC 20<sup>th</sup> anniversary awards**

The EPC will celebrate its 20<sup>th</sup> anniversary (in its current guise) next year. To mark the occasion, we're offering two awards.

The first, also supported by the *Incorporation of Hammermen of Glasgow*, is for students (both undergraduate and postgraduate) and is a prize for the best essays on what the next generation of engineers thinks about engineering and its contribution to the well-being of our economy. We're offering cash prizes and the overall winner will have the opportunity to deliver a lecture in response to Professor John Perkins' keynote speech at Congress next year. The deadline is 8<sup>th</sup> January 2014.

The second is a public engagement grant award scheme. Staff of EPC member institutions are offered the opportunity to apply for 2 grants of up to £10k each for innovative projects with national application which help with the public understanding of engineering and/or help equip engineers working in academia to improve their skills in this regard.

Full details of both awards available at: [epc.ac.uk/20th-anniversary-awards](http://epc.ac.uk/20th-anniversary-awards).

**President's Report**

A recurring theme of the conversations I've been having recently is that a key element underpinning the international standing of Engineering Higher Education in the UK is the way in which we integrate research and industrial engagement activity with teaching and how our system would be impoverished if these links were damaged. Indeed it is hard to conceive how high quality engineering education could be delivered without an industrial and research context to ensure relevance and vitality. Last month, a delegation of EPC Committee members met with a number of senior officers at the Department for Business Innovation and Skills (BIS) to discuss how UK higher education might best be equipped to deliver the quality and quantity of engineering graduates the country needs (and the numbers needed were demonstrated again in this year's *Engineering UK* report on the *State of Engineering* published this month).

Around the time of that meeting, the Perkins Review was published. We welcome the positive statements now being made about the importance of engineering to the country's Industrial Strategy and are very much looking forward to working with Professor John Perkins' team at BIS to implement the recommendations of his recent Review of engineering skills. In particular, we are keen to build on, and develop innovative approaches to the content and funding of postgraduate study, with industry partners, to help ensure that the country has the higher level skills it needs for technological and economic leadership. We are also greatly looking forward to welcoming Professor Perkins as keynote speaker at our Congress 2014 in Glasgow on 8/9 April where we will have an opportunity to hear more about the outcomes of this important review, which is likely to shape the agenda for engineering education for many years, and consider how we might respond to it.

I can't sign off a message to members at this time without mentioning the REF...I'm sure that EPC members are breathing again now that their submissions have been completed. It's been a marathon task – intellectually, administratively and emotionally – and we won't know the results and funding implications until this time next year. Clearly we're hoping that the Chancellor's Autumn Statement this month, with its support for investment in STEM subjects, will provide the boost our researchers are looking for. Very concerning, of course, is how BIS's required £304M spending reduction over the next two years will impact the Science Budget and we're looking forward to working with CaSE and others in the lead up to the next Comprehensive Spending Review (CSR) to continue to press our message – re-emphasising how a well-funded Science Budget is intimately linked to the delivery of the Government's economic and industrial strategy. The impact case studies on which we have all been working will be instrumental in helping to make this case and we will be returning to you next year to seek permission to access and use them in supporting the messages about the importance of adequately funding engineering research, innovation and knowledge transfer in the UK.

It only remains for me to wish you a restful festive period but not without first urging you to take a look at the EPC's [20th Anniversary Awards](#) – for both staff of our member institutions and their students.

Professor Simon Hodgson



## Recruitment and Admissions Forum 2013

“...a very useful event, particularly the opportunities to network and get a context for student numbers across the country. The presentations on this were very useful and informative in this respect. Seeing the “big picture” is extremely useful....” *Feedback from a delegate*

Our annual Recruitment and Admissions Forum was kindly hosted this year by the Institution of Civil Engineers on 4th November with over 50 delegates from our member institutions attending and lots of opportunity to make contact with the organisations who are working to enthuse young people about science and engineering.

Our line-up of colleagues came from a range of organisations which included the Royal Academy of Engineering (RAEng), STEMNET, the IET, Engineering UK and Mathematics in Education and Industry. We heard about recent trends and activities and, in particular, the impact of the very many changes in the education policy and funding environment which have taken place this year, their impact on recruitment of engineering students and some of the great work that’s taking place to encourage the study of engineering in higher education. The [speakers’ presentations](#) are available to members on the EPC website. Particularly popular was the session from Matthew Harrison from RAEng on the implications of the changes to the pre 19 education system in the devolved nations of the UK, and the following panel debate where representatives of Scotland, Northern Ireland and Wales provided their perspectives. EPC Committee member and convenor of next year’s Congress, Professor John Davies, has written a handy “[Brief guide to the Scottish educational system: for admissions tutors elsewhere](#)” which you can find in the Toolkit area of the Members’ Portal on the EPC website, along with a range of other useful links.

## EPC Enrolments Survey 2013/14

“Over half of the 82 university engineering departments that responded said that their intake of UK and EU undergraduates had increased in 2013/14...”

that responded said that their intake of UK and European Union undergraduates had increased in 2013/14, with about half who recorded an increase indicating growth of more than 10 per cent. Student numbers had fallen in only 19 departments and 17 said recruitment levels had stayed the same.

Recruitment of non-EU undergraduate as well as home and international postgraduate engineering students also improved at many departments this year after what looked like a significant slump in demand according to the 2012/13 poll. We’ll be taking a look at the HESA stats when they’re published in February and reporting back. You’ll be able to access a full analysis (and see whether it aligns with the messages from last year’s survey ) on the [Members’ Portal](#) on the EPC website in the spring. In the meantime, members can download [a copy of the survey results](#) from the website where you’ll be able to see the results by sub discipline too.

We also provided a summary of the results of the EPC’s 2013/14 survey the enrolment experience of member institutions and we’re grateful to the very many members who completed the survey which is now becoming widely recognised as the early barometer of 2013/14 recruitment levels to engineering. Over half of the 82 departments

## In short...

**The House of Lords Science and Technology Committee Report on Scientific Infrastructure** was published in late November. The EPC’s contribution was extensively acknowledged and our thanks to those members who contributed to our consultation response which may be [downloaded here](#), together with the Lords’ report.

While the report is broadly positive about the state of scientific infrastructure in the UK, the Committee warns that “*a lack of a clear long term strategy and investment plan, with a clear commitment to engagement with international projects, is impairing the UK’s ability to remain internationally competitive over the long term.*”

The Committee also found a “damaging disconnect” between capital investment and funding for operational costs, that is, while building important large scale infrastructure has been budgeted for, the costs to keep it running have not which of course has serious implications for the sustainability of the investment.

The Committee recommends “*that the Government reviews the current situation to make sure that capital investment and operational costs are tied together in one sustainable package*”.

Please [contact us](#) if you have forgotten the password for the Members’ Portal on [http://: epc.ac.uk](http://epc.ac.uk)

## Perkins Review

Professor John Perkins' review of the provision of engineering skills in the UK economy was published in November 2013.

The review endorses the widely accepted view that substantially increasing the supply of engineers entering the labour market would benefit the UK economy and includes 22 recommendations for action by Government, industry, the engineering profession, 6 of which are focused on higher education (HE). We'll be hearing from Professor Perkins at Congress 2014 on how implementation of the recommendations is progressing and the EPC Committee is currently working with the implementation team in developing its workstreams.

### The HE recommendations

- Government should review funding arrangements for engineering degree courses to ensure that they are financially sustainable ...
- Government should ensure that the £200M teaching capital fund encourages diversity by seeking evidence of commitment as a prerequisite for receiving funding.
- HE institutions should work with Government and commercial banks to ensure their students are aware of Professional Career Development Loans.
- The engineering community should develop concerted engagement with university students, including work placements, to raise the profile of engineering careers and ensure that students on every campus are aware of the full range of diverse opportunities ...
- Engineering employers should explore the potential for developing co-operative cross-sector schemes to support postgraduate students.
- Government, through EPSRC, should seek further evidence of unsatisfied demand for engineers trained to doctoral level, and review arrangements for their support

## Update on the impact of the visa regulations and what's being done about it...

Last month, the Parliamentary and Scientific Committee, of which EPC is a member, held a discussion meeting entitled "*A Good Immigration Policy for Science*". EPC committee members **Tony Brown (Manchester)** and **John Mitchell (UCL)** were there and report on the debate...

the UK as open to overseas students is just as important as the actuality....and that this will take some time to turn around. There was recognition that the students we are looking to attract are highly mobile - we are competing in a high value international market that others are just beginning to realise. Traditionally the market has been UK/US centric but courses taught in English are emerging across Europe and elsewhere.

Others highlighted some positives from recent changes: *New Routes*, for example permits paid engagement - up to a month without sponsorship for research collaborations and a 12 month stay for PhD and MBA graduates (although the take up has been low). The continued presence of engineering subjects in the Shortage Occupation (SOC) list of engineering subjects was welcomed. It was also highlighted that the UK is now faster than most jurisdictions for tier 2 visas (particularly when compared with European competitors) - the UK now typically takes less than 15 days to process a tier 2 visa. However, some problems remain, for example, when changing employers and there does seem to be an overall increase in bureaucracy."

**Professor Tony Brown**, University of Manchester and EPC Committee member, went on to note the issues and recent actions taken around recruiting staff..."There was a discussion of the use of the exceptional talent visa (Tier 1). Far, far fewer engineers and scientists have used this route than footballers and ballerinas. However, it was unclear if this was owed to the way that the Royal Society and the Royal Academy of Engineering are applying the definition of exceptional talent or whether it is just that this is only used in exceptional cases where tier 2 visas are not appropriate, which in the case of engineering and science is fairly rare.

It was reinforced that the Home Office recognise that HE is a special case and would welcome a further interchange and specific examples of preventative bureaucracy. This was consistent with what we heard when EPC met with BIS last month. There have been a number of recent tweaks to the system - including a short paid for visit of up to one month for visiting academics who do not need the full sponsorship. And therein lies another issue. I'm not sure how widely known this last "tweak" is. I think communications of the evolving policy could be improved and there is still a lot of local misunderstanding.

There did seem to be a lot of interest from the Home Office and others in the mobility requirements of top researchers and a view that the UK wants to attract leading academics and students to the country as well as retain talented international staff. One good, positive suggestion was the possible linking of the granting of competitive fellowships via the national academies or RCUK to a fast track visa system as this is a way of judging exceptional talent."

If you have specific examples of remaining bureaucratic issues which are preventing you from bringing top academic talent to your university, do [let us know](#). The more real examples we have, the better equipped we are to influence the debate.

From **Dr John Mitchell**, University College London and EPC Engineering Education, Employability and Skills Sub Committee member:

"There was a consensus that the system had improved, although the main concern was over the image that was being portrayed to the rest of the world. In particular, examples from India were cited of negative press coverage.... Many commented that the perception of

## Get involved...



...we've a number of surveys, consultations and opportunities to provide input that are live as we go to press...

### Quick poll

Just for "fun", as they say, we've a poll open that asks what weighting impact should be given in the next REF. Tell us what you think...  
<http://epc.ac.uk/ref-weighting-poll/>

### CSR preparation

On the subject of impact, we'd really like to gather a range of impact case studies on which we can draw in preparing our case for support in the next Comprehensive Spending Review (CSR). You may deposit them here:  
<http://www.smartsurvey.co.uk/s/55751COSXH>

### RAEng study

And finally, we're supporting a RAEng study on the contribution of teaching excellence and industrial and societal impact work to academic recruitment and promotion. You may complete the survey here:  
<https://www.surveymonkey.com/s/RoyalAcademyStudyv1>



## Upcoming events

Date	Venue	Location	Notes
8 January, 2014	PHEE/ PHOMME (EPC Sectoral Groups) Joint Conference	Institution of Mechanical Engineers, London	All welcome To register: <a href="http://epc.ac.uk/phee/">http://epc.ac.uk/phee/</a>
8/9 April, 2014	Engineering Professors' Council Congress 2014	University of Glasgow	All welcome <a href="http://epc.ac.uk/events/epc-congress-2014/">http://epc.ac.uk/events/epc-congress-2014/</a>

Congress 2014 will be held at the University of Glasgow. Congress 2013 had a line-up of really high profile speakers from business, politics and the university sector. Next year, we're experimenting with doing things slightly differently. Of course, we will still include highly distinguished speakers but this time there's much, much more opportunity for input from you (and your students).

First: we'll be presenting the final of our [public engagement grant award scheme: "Engaging in Engineering"](#). The six applications that make it to the final round will make their pitches to **Congress delegates** who **will vote on the two winning projects**....

Second: the winner of our new [student essay competition](#) will deliver a presentation based on their winning work **in response to Professor John Perkins' keynote speech** so we will be hearing from the next generation of engineers about what role engineering in HE has to play in the future health of the UK economy...

Third: we're planning on putting together what could loosely be described as a **"crowd-sourced" Pecha Kucha**. We're running a couple of workshops, one of which will be on the state of postgraduate engineering education and funding and we're going to be asking you to contribute to this one by answering some questions in advance of the session to build the initial presentation which will be in Pecha Kucha form. If you don't know what Pecha Kucha is... [read on here](#)...and look out for our call for contributions...We're also hoping that some colleagues from universities who were successful in their bids to HEFCE for a share of the Postgraduate Support Scheme funding will be contributing some case studies. Our other workshop will be on the subject of impact. Professor David Nash of the University of Strathclyde will be sharing his experience of co-ordinating an EPSRC-funded Impact Acceleration Account and chairing a discussion on how you're now using your REF impact case studies...and preparing for the next time...

Bookings open in early Jan.

Engineering Professors' Council  
PO Box 789  
Godalming  
Surrey  
GU7 9FW  
Tel: 07786 176 028



@epc1994