



# HITTING THE ROAD

A WELL-TRAVELLED  
ENGINEER IS A MORE  
EMPLOYABLE ONE, ARGUES  
JARKA GLASSEY

**T**HE number of chemical engineering graduates in the UK has been increasing year on year since 2001 and, according to IChemE records, the UK chemical engineering graduate output has increased by 20% over the last five years. This is a reflection of not only the success of the *whynotchemeng* initiative promoting the chemical engineering career to future generations, but also the changes in the economy and potentially also the funding mechanisms for higher education in the UK.

With higher graduate numbers, potential employers have a much broader field of applicants to choose from and thus graduates increasingly have to look for features in their CVs that make them stand out from the rest of the candidates. What

better way of achieving this than being able to say that you travelled to a different country to either take up a placement, to carry out your research project or to study at a university abroad? After all, a graduate that is prepared to meet all the challenges of living and working abroad – even for a relatively short period of time – is likely to be much more adaptable and a quick learner.

## TOUCHDOWN

My own experience certainly supports this assumption. Arriving at London's Heathrow airport many years ago, full of excitement (and apprehension too, especially when I couldn't understand the Cockney accent of the bus driver asking a simple question and wondered whether my knowledge of English was going to help me to get by at all) I never

thought that the three-month placement at Newcastle University would change my life so radically.

I was in the final year of my chemical engineering studies at the Slovak Technical University in Bratislava, embarking on a placement scheme run by the International Association for the Exchange of Students for Technical Experience (IAESTE).

To take part in that scheme was one of my goals ever since I learnt of the opportunity to travel abroad to extend my technical experience, but also to improve my knowledge of English and experience other cultures (particularly since travelling beyond the 'iron curtain' in those days was almost impossible).

My expectations were not only fulfilled, but exceeded, and my short placement led to an offer on a PhD project at Newcastle and eventually to an academic position there. The experiences of my students since then confirm my own views of the benefits of study abroad. Whether these are my UK students undertaking placements abroad (including countries such as Australia, Germany, Italy, Spain, and the US) or my overseas students coming to the UK to complete their studies – they have all commented on the benefits of studying and working abroad.

It's not all plain sailing though. Travelling to another country (to live and work or study), even for a short period of time is not easy, even if you speak the language. I studied English for a number of years before my first visit to the UK, but even our UK students from other parts of the country acknowledge that getting used to the Newcastle ('Geordie') dialect takes some time. Cultural differences and even getting used to the new climate also add to the rapid learning curve during your stay – although I'm sure our students currently on placement in Australia would not complain about surfing on Bondai Beach.

However, all of this is part of the challenge and the opportunity to develop very important professional skills, for example adaptability, initiative and problem solving, amongst others.

Demonstrating your potential to employers during interview that you have the drive and the ability to take such big steps typically puts you at an advantage compared to other graduates, most of whom will also have demonstrated technical competence via an IChemE-accredited course.

## MISSED OPPORTUNITIES

Despite all these benefits, UK student mobility remains at very low levels. In fact Eurostat data<sup>1</sup> indicates almost no increase

in UK student mobility over the period 2000–2010 (remaining at around ten students travelling per 1,000 people) while, for example in Germany, this figure increased from around 35 to more than 90 between 2000–2010. Inward mobility to the UK during the same period increased from around 100–110 to nearly 190 in 2010.

In addition, a quick review of Erasmus exchange data<sup>2</sup> indicates low levels of outward mobility of UK students. For example, in 2010–2011 only just over 8,500 UK students participated in the scheme compared to over 25,000 from Germany or France and over 31,000 students from Spain participating in the Lifelong Learning Programme of Erasmus.

There are a number of initiatives to explore the low mobility of UK students compared to their EU counterparts. However, increasing awareness of the opportunities and ensuring that exchanges for final research projects and industrial placements abroad are promoted effectively can result in increased opportunities for the UK students to benefit from studying abroad.

IChemE's Education Special Interest Group aims to play a significant role in this by promoting schemes such as Erasmus and IAESTE as well as the EFCE Working Party on Education Sponsored Student Mobility Award.

The typical structure of a UK-based chemical engineering course already enables students to either undertake a work placement, which may be even more beneficial if undertaken abroad, or carrying out their final research project at an institution abroad.

The universities typically offer support and information on securing placements through their international offices, and departments often have dedicated Erasmus officers providing details on contacts with other chemical engineering departments where research projects could be carried out. Given all this support we will hopefully see more UK students benefiting from work or study abroad, preparing them more for a globalised professional career.

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## FURTHER READING

1. Feise, H, EFCE Working Party on Education, The Hague, April 2013) <http://epp.eurostat.ec.europa.eu>
2. [http://ec.europa.eu/education/lifelong-learning-programme/erasmus\\_en.htm](http://ec.europa.eu/education/lifelong-learning-programme/erasmus_en.htm)

DEMONSTRATING YOUR POTENTIAL TO EMPLOYERS DURING INTERVIEW THAT YOU HAVE THE DRIVE AND THE ABILITY TO TAKE SUCH BIG STEPS TYPICALLY PUTS YOU AT AN ADVANTAGE COMPARED TO OTHER GRADUATES, MOST OF WHOM WILL ALSO HAVE DEMONSTRATED TECHNICAL COMPETENCE VIA AN ICHEME-ACCREDITED COURSE