

***Attracting, Educating and Collaborating with  
International Scientists & Engineers***

**A CaSE Opinion Forum sponsored by the British Council**

**Monday 7<sup>th</sup> July 2008, London**

Over the course of the day, a series of presentations will illustrate and explore the following issues. The presentations are intended to stimulate debate rather than give definitive answers. Their content will then be considered in break-out groups and a panel discussion, enabling participants to develop policy suggestions and point out other issues.

**Background**

An important and increasing proportion of the STEM workforce now comes from overseas. Fortunately, at the moment, the flow outwards is less than the flow in across the sector. At the student level, in the core sciences, about 8% of undergraduates are international, compared with up to 17% in some biological specialisms, 14% in mathematics and 20-30% in engineering. The rates of international post-graduate science, mathematics and engineering students typically range from 40-80%. Over all subjects, 27% of academic staff are from overseas.

**1. Attracting International Scientists & Engineers**

International scientists and engineers have supported our industry through its skills shortages. But recent reports suggest that some sectors are finding it harder to recruit from abroad.

- What attracts international workers to the UK and are we losing our edge?
- What are the necessary support structures to have in place?
- Are we over-reliant upon international scientists in some fields, given their increased mobility?

**2. Educating International Scientists & Engineers**

The benefits of educating international students include a multi-cultural environment, sharing skills with other nations, and economic gain. The fee income of all international students is estimated at £1.68 billion and the several thousand students who stay on in the UK after completing their studies generate an estimated £2 billion GDP. However, our market share is falling, from 16% in 1998 to 11% in 2004.

- What are the consequences of our growing dependence on international students?
- How do we maintain our attractiveness without compromising students' education and experience?

**3. Collaborating with International Scientists & Engineers**

International and UK scientists and engineers who move abroad should be encouraged to maintain links with the UK to foster future collaborations. Multinationals are not investing in the UK R&D at the same rate as UK-based industry; hopefully this does not reflect a decline in the attractiveness of the UK for international collaborations – we must work to understand this trend.

- Do new visa requirements meet the needs of international collaborators?
- Are there sufficient mechanisms in place to facilitate scientists and engineers who have worked or studied in the UK to continue to collaborate with us?
- What is the role of learned and professional societies in fostering international collaborations?