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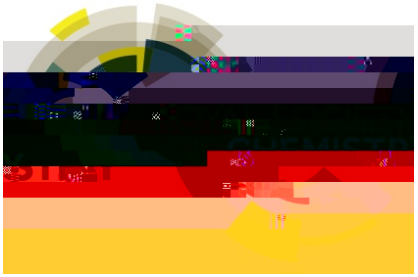

An immigration system that works for science and innovation

A response from the Royal Society of Chemistry to the House of Commons Science & Technology Select Committee.

Summary

The Royal Society of Chemistry is pleased to have the opportunity to contribute to the House of Commons Science & T

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Main text

Introduction

Throughout the discussion on science and the UK's exit from the EU, the research and innovation community have been unanimously clear about the importance of people. Easy movement of people is essential to science. This is clear in both the evidence received by the House of Commons Science & Technology Select Committee as part of their *Brexit, Science and Innovation* inquiry and in the evidence received by the Migration Advisory Committee, in relation to their work on the impact of EEA and non-EEA workers in the UK labour market.[2]

In our previous response to the committee,[3] we have made clear that there are specific issues concerning how science and innovation is undertaken that means that those working in this area tend to be highly mobile. Because of this, for the UK to achieve the Home Office's stated goal *'to take steps to ensure that Britain is able to attract the brightest and the best'*[4], an agile and flexible immigration system is essential. In this response, we explain, with supporting evidence, the kinds of mobility that a new UK immigration system must be able to support for UK science and innovation to continue to be world leading.

International researchers working in the UK

For the UK to remain globally competitive in science and innovation we must attract skilled and talented people to work in our companies and universities.

The research community across the UK is already international in make-up. Data from the Higher Education Statistics Authority indicates that in UK chemistry departments around a third of staff come from outside the UK:

- 18% of staff are non-UK EU nationals
- 14% of staff are non-EU nationals[5]

These people bring ideas and knowhow at the frontiers of scientific discovery and application, enable the UK to establish new capability, and train the next generation of researchers and innovators.

Understanding the extent to which non-UK nationals make up the wider workforce across scientific industry has been challenging. However, in our response to the House of Lord Science and Technology Select Committee, we shared views from those working in the life sciences industry regarding access to international talent:[6]

We have heard that in areas such as computational chemistry, bioinformatics and biophysics, access to a global pool of talent (so not only EU or EEA) was essential to find scientists with the skills needed for a company to take advantage of new research fields (e.g. big data) to enable them to innovate further. Building domestic capacity across the breadth of science and innovation (including new and emerging fields) will be essential to delivering an industrial strategy that enables growth.

It is essential that the UK's future immigration system contains enough 'built-in' flexibility to respond to rapid change and trends in science and innovation, enabling the UK to bring in the skills that it needs in fast-moving new fields as they emerge.

Alongside mechanisms to enable scientists to move to the UK longer-term, evidence shows that scientists are highly mobile; moving between institutes and countries is a common part of scientific careers. These periods of mobility, which can vary from the order of days to several years, are a widely accepted feature of scientific careers.[7]

Scientists need to move for fixed periods

Medium-term mobility requirements

Across research and innovation, movement on a scale of months to years is considered an important element of research careers. For those working in academia, undertaking post-doctoral research is the main mechanism through which this kind of movement occurs. Post-doctoral researchers are a highly-skilled, dynamic, mobile group of researchers that contribute significantly to the UK's overall research outputs and are a vital part of the academic UK scientific workforce. Post-doctoral roles are typically fixed-term contracts from 1-3 years.

Comparing the proportion of researchers in chemistry departments on permanent versus fixed-term contracts, we find that almost three-quarters of those on open-ended or permanent contracts are UK nationals. Over a third of staff on fixed-term contracts are from outside the UK:

- 74% of staff on open-ended or permanent contracts in chemistry are UK nationals
- 35% of staff on fixed-term contracts in chemistry are non-UK nationals[8]

These kinds of fixed-term roles are a ubiquitous feature of academia around the world and support individuals to develop into independent researchers. After their post-doctoral contract ends, these researchers may transition into new roles across academia, industry and other sectors in the UK. However, they may move to a role in another country. Movement into a different role in the UK

A detailed analysis of one of these events, the 13th International Conference on Materials Chemistry, held in Liverpool in July 2017, reveals that 568 delegates from 44 different countries attended this conference. This meeting, which highlights the latest developments and discoveries in materials chemistry, featured top researchers from around the world presenting their work. Materials chemistry is a discipline that underpins the development of solutions to a number of broader global challenges across areas like environment and energy. It involves the design and synthesis of materials with desirable characteristics, which can then be applied in a diverse range of ways across the world, e.g. more easily recyclable plastics or new batteries for energy storage. This international meeting featured 30 plenary talks from researchers working in 11 different countries, including Switzerland, China, the Netherlands and India.

As explained above, the Home Office has already acknowledged that there is a strong link between the UK's immigration system and the UK's ability to deliver an Industrial Strategy, which improves growth and prosperity across the country. The Industrial Strategy white paper highlights

