

Report for Committee on Chemistry Education 2012 United Kingdom

1. National educational policy

A review of the curriculum and assessment for A Levels (16-19) has been recently announced. The changes will include a review of the quality assurance of qualifications and the Royal Society of Chemistry will hope to play a coordinating role for the chemistry community.

In higher education, from 2012 undergraduates will have to pay tuition fees of up to £9000/year. This fee will be payable after graduation when students earning exceed £21000. This change has had an immediate effect of applications to higher education with a national drop of 9%. Early indications suggest that science, engineering and maths have fared better than arts and humanities, with wide variations across the sector.

2. Events in chemical education

The Association of Science Education Annual Conference took place in January. This is the premier conference for school chemistry teachers. In higher education, the variety in Chemistry Education took place in August. The national HE Stem programme has funded a number of projects in chemistry and has organised a national STEM conference for September. The Higher Education Academy also organised a STEM conference in March.

3. Activities of the Royal Society of Chemistry

The education activities of the Royal Society of Chemistry are overseen by its Education Division Council. Its current strategic priorities for 2012 include:

- Completing a framework for chemistry education for 16-18 year olds. Completing the work of the National Curriculum Review. Preparing for work on A' level reform.
- The development of LearnChemistry, an online resource centre.
- Development of a coherent careers programme with a "cradle to grave" philosophy.
- Evidence based development of teaching in chemistry higher education.
- Dissemination of higher education teaching practice to schools.
- encouraging more teachers to engage with the RSC
- A campaign for more funding and resourcing for practical work in schools and universities.

In collaboration with the HE STEM Programme over 320 'Spectroscopy in a Suitcase' events have been held with over 11,200 students participating. 10 context and problem based learning resources are being produced by six development teams. These will be launched on LearnChemistry. The resources are focused on topics such as medicinal chemistry, chemistry of energy and pollutant monitoring and remediation.

Chemistry Education Activating Research: This US bursary scheme has funded two individuals to enable them travel and give a paper at the Biennial Conference on Chemical Education conference, 29th July – 2nd August 2012. Over 40 applications were been received.

Getting started in Pedagogical research in Higher Education: 60 people attended this conference which was co-supported by the HE STEM Programme and held in London in March 2012. A MyRSC group has been set up to develop a community in this area.

4. Publications about chemical education in your country

Education in Chemistry published by the RSC.

<http://www.rsc.org/Education/EiC/index.asp>

Chemistry Education Research and Practice published by the RSC.

<http://pubs.rsc.org/en/journals/journalissues/rp>

5. Activities relating chemical industry and education

Joint RSC meeting with SusChems with commitment to work with RSC Industry and Technology Division to identify industrial case studies to use in teaching.

6. International activities that were visited

Institute of Chemistry Ceylon, Sri Lanka, June 2012

8. Brief resume or CV of the national representative

Tina Overton is Professor of Chemistry Education at the University of Hull, UK, and President of the Education Division and Council Member of the Royal Society of Chemistry. She has been awarded the Royal Society of Chemistry's HE Teaching Award, Tertiary Education Award and Nyholm Prize and is a National Teaching Fellow and Senior Fellow of the Higher Education Academy.