

“The Role of the Universities in the Europe of Knowledge”



Comments from the Federation of European Chemical Societies (FECS).

FECS supports the main thrust of the Commission's paper. Universities are central to the creation, dissemination and exploitation of knowledge and thus central to the economic development of Europe.

Chemistry is at the heart of the scientific and technological innovation upon which the success of the European economy depends. It is the enabling science that underpins the rest of science and technology. Environmental protection, healthcare, energy and the conversion of materials into manufactured goods are all dependent upon an understanding of processes at the molecular level. Continuing prosperity requires a well educated citizenry able to deal with issues arising from the opportunities and challenges of scientific advances, with a significant proportion being able to contribute to the development of the chemical sciences, and utilise chemical knowledge and skills in a very wide variety of situations. The chemical and pharmaceutical industries (themselves being only a small proportion of economic activity based on the chemical sciences) make a massive contribution to the European Gross Domestic Product.

To continue to be successful universities must continue to strive to provide ever higher quality education in chemistry as the subject advances and compete globally in research and the application of the new knowledge thus created. To do so requires funding, which by the very nature of the discipline will necessarily have to be at a higher level per student or per researcher than is currently the case. In many countries the differential funding for a laboratory based subject like chemistry in comparison with disciplines that do not require specialist facilities is insufficient.

If the Commission's intention in the paper are to be realised, European agencies and many national governments will need to increase their spending on this central science.

In so doing a powerful message will be sent that science, and in particular chemistry is of central importance in higher education and to the future of Europe. This in turn needs to be backed by programmes aimed at enhancing science education in schools, extending provision to primary schools where this does not already exist and, in many countries, improving the supply of well qualified teachers of chemistry and other sciences. These measures are essential to increase the flow of able young people into chemistry. FECS member societies have considerable expertise and many have significant programmes of support for chemistry in schools that could be built upon to support these aims.

Footnote:

The Federation of European Chemical Societies and Professional Institutions is a voluntary association, the object of which is to promote cooperation in Europe between those non-profit-making scientific and technical societies and professional institutions in the field of chemistry whose membership consists largely of individual qualified chemists and whose interests include the science and/or practice of chemistry. It was founded in 1970.

A powerful voice for chemists and chemistry, FECS, through some 50 member societies in nearly 40 countries, represents some 200,000 individual chemists in academia, industry and government in Europe.

The paper itself identifies many of the measures that need to be taken to enhance the competitiveness of universities in comparison with those in the USA. Amongst these we highlight:

- realisation of the goals of the Bologna process to enhance mobility;
- competitive salaries for the best students and researchers ;
- reforming working practices that militate against the progress of women in academic chemistry;
- tax incentives to encourage donations to universities;
- freedom to collect and use royalties on patents and provide services

as being in particular need of attention.

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