

# LIGHTS! CHEMISTRY! ACTION!



**The Royal Society of Chemistry launched the United Nations International Year of Chemistry 2011 [IYC 2011] at the House of Commons on Monday 24 January with the help of the Rt Hon David Willetts MP, Minister for Universities and Science.**

IYC 2011 is a worldwide celebration of the considerable achievements of chemistry and its contributions to the wellbeing of humankind.

But it wasn't the usual kind of reception or the usual kind of launch. It was something completely different.

The Commons Terrace Marquee was packed to the hilt and there was a palpable sense of occasion and anticipation – because everyone knew that two little pieces of Parliamentary history were about to be made.

For the first time ever, a series of live chemistry experiments were performed on the Terrace of the House of Commons in a pioneering

display in Parliament of the wonders of chemistry.

For the first time ever, a live webcast was made from the Terrace of the House of Commons enabling people throughout the UK and around the world to see the launch in Parliament, the speeches and the experiments via the RSC website.

The launch was co-sponsored on an All-Party basis by Mark Lancaster TD MP, Dr Julian Huppert MP and Andrew Miller MP, Chair of the Commons Select Committee on Science and Technology. They also jointly sponsored EDM 1324 on the Commons Order Paper.

## IYC 2011

IYC 2011 aims to increase the public's appreciation of chemistry in meeting world needs, to engage young people in chemistry and to generate enthusiasm for chemistry's creative future.

Chemistry – the science of matter, its properties and reactions – lies at the heart of the most promising multi-disciplinary research. Whether it is in nanotechnology, catalysis or tissue engineering, chemistry is involved in new exciting discoveries with the greatest potential to benefit our society. The need for these discoveries has never been greater.

Throughout the year a wide

range of interactive, entertaining and educational activities for all ages will take place, allowing children and adults alike to explore the critical role of chemistry in our lives. For example, on 22 June teachers and pupils from constituencies all across the UK will be taking part in a global chemistry experiment into the properties and quality of water. It will be the largest chemistry experiment ever conducted.

## PARLIAMENTARY LAUNCH

Andrew Miller chaired the proceedings and introduced the President of the Royal Society of Chemistry, Professor David Phillips OBE CChem FRSC, who

referred to the centenaries of the Nobel Prize in Chemistry to Marie Curie for her discovery and work on Radium and the discovery of Polonium, and of Ernest Rutherford's revolutionary theory of the atom.

Professor Phillips explained that the ground-breaking discoveries made by Curie, Rutherford and many of the other great minds at the turn of the last century had sparked huge advances in human development: in terms of life expectancy and quality of life, personal mobility, the ability to feed humanity, and, more recently, in the number of ways to communicate. But what many people didn't realise was how the pace of change is accelerating. He drew attention to the fact that the discoveries of the past enabled us to find ways of producing more while consuming ever increasing amounts of materials and energy. The challenge now was to build on this knowledge and to produce more of the things we need while consuming less of our scarce natural resources. This required a whole new way of doing things and a whole new way of thinking.

It would also require a new generation of scientists and

engineers to make this change possible. Inspiring them with a lifelong interest in science was a top priority and hence IYC 2011 will explore how people can work together to demonstrate the vital role of chemistry.

There was also a contribution from Ethiopia given by Professor Temechegn Engida, President of the Federation of African Societies of Chemistry, a body which was instrumental in securing the UN resolution which declared that 2011 would be the International Year of Chemistry.



In his address the Minister paid tribute to the role and importance of chemistry which he described as "so fundamental to everything that enables us to lead civilised lives" and made such a vital contribution to the UK economy. He then declared himself ready to help launch IYC by

transforming himself, along with his Parliamentary colleagues, into high-powered laboratory assistants.

## THE CHEMISTRY EXPERIMENTS

The experiments were all conducted by Professor Hal Sosabowski and his team from the University of Brighton. All the experiments had been exhaustively approved and authorised well in advance by the House authorities under the helpful guidance of the Serjeant-at-Arms who was present at the event to see them conducted.

David Willetts inaugurated the first experiment which involved *Chemical Luminescence* designed to illustrate a reaction that gives out light rather than heat (which some people occasionally argue is the reverse of Parliamentary debate!). The effect, which was instant and spectacular, was created by pouring a liquid from one test tube into another.

The second experiment was a *Pulsing Reaction* – for which Andrew Miller was the laboratory assistant – and featured a large test tube whose liquid content magically changed from clear to coloured and back again repeatedly.

The third experiment was the so-called *Floating Boat* where a lightweight tinfoil craft – launched by Dr Julian Huppert – floated magically in thin air on the top of an apparently empty fish tank.

All three MPs then participated in the next experiment which featured the *manufacture of clouds* with the use of solid carbon dioxide in hot water. The film camera caught the drama of this experiment.

The final experiment was performed outside on the Terrace solely by Professor Sosabowski (to the dramatic accompaniment of the music used in *2001: A Space Odyssey*) while the crowd inside pressed their faces to the glass doors. Called *The Barking Dog* it featured a series of perfectly timed controlled explosions in a number of different tubes – and it brought the official opening formalities to a spectacular end.

IYC 2011 was well and truly launched.

To watch the edited webcast highlights (speeches and experiments) please log on to [www.rsc.org](http://www.rsc.org) and follow the directions.



Professor Hal Sosabowski is flanked by RSC President David Phillips, Andrew Miller and the Science Minister