I am delighted to have the opportunity to address this important Irish EU Presidency Conference. The Conference was officially designated as a Presidency event as it is very much in line with our Presidency priorities for research and innovation.

I want to thank the European Commission for its support, both financial and non-financial, that facilitated Ireland hosting Europe’s largest nanotechnology conference. This is Ireland’s single largest research-related Presidency event. I would also like to thank the organisers: Enterprise Ireland and Spinverse for realising such an interesting programme over the next three days.

Also, I would like to acknowledge the support provided by Intel and the partnering with the Intel Business Challenge Europe Finals is a particularly innovative addition to the conference and you will learn more about that shortly.

It is fitting that the Convention Centre, as a modern high-tech venue, has been chosen as the location for a conference that is focused on nanosciences and nanotechnology – Can you get any more high-tech?

The importance of nanotechnology cannot be over-stated and it has been designated by Europe as one of its Key Enabling Technologies, more commonly referred to as KETs. I would like to return to how Ireland has positioned nanotechnology with Innovation at its core, but before I do that, let me give you a brief update on Horizon 2020 from the Irish Presidency’s perspective.

**Horizon 2020**

The key research and innovation priority during the Irish Presidency is to achieve political agreement on the Horizon 2020 Programme - the next European Research Framework programme due to commence in 2014.

We have been working hard with the Member States, the European Commission and the European Parliament to finalise agreement on Horizon 2020 during our Presidency and this work will continue right to the end of June. You have just heard from the Commissioner that the all important “trialogue” discussions are at such an advanced stage.

It is a very complex process to reconcile the various interests of all the parties involved. However, I
welcome the shared commitment among all the parties concerned in advancing these negotiations. It is vital that we demonstrate to the citizens of the European Union that we are representing their interests efficiently and effectively. And it is essential, therefore, that we make progress as speedily as possible to ensure that there will be sufficient time to give effect to the necessary legislative procedures to implement Horizon 2020 from the start of 2014.

An important feature, indeed an important innovation, of Horizon 2020 is the focus on addressing the major societal challenges - major concerns shared by citizens in Europe and elsewhere. A challenge-based approach will bring together resources and knowledge across different fields, technologies and disciplines, including social sciences and the humanities, to help address issues such as climate change, developing sustainable transport and mobility, making renewable energy more affordable, ensuring food safety and security, and coping with the challenge of an ageing population. Research in these areas offers enormous opportunities for European citizens and for you as researchers, industry leaders and entrepreneurs.

As well as the Societal Challenges and Excellent Science, central to the success of Europe’s largest Research and Innovation Programme to date will be the Industrial Leadership pillar. For Europe to succeed, we need Jobs, Stability and Growth. This is Government policy in Ireland and the wider EU. Competitiveness, underpinned by technological advances will be critical to achieve a return to growth in Europe. Given Europe’s activities and potential in this arena, nanotechnology, as one of the Key Enabling Technologies, will feature prominently in this return to growth and in the Industrial Leadership pillar of Horizon 2020.

The scale of the budget for Horizon 2020, over €70bn, is testament to the importance attached to continuing to invest in Europe’s science base.

Science, Technology and Innovation Policy

In Ireland, the policy of investing in our science base has had a very positive impact on our industrial development and highlights how research, development and innovation contribute significantly to job creation and economic prosperity.

It has been based on an ambitious two-pronged strategy of investing in people, infrastructure and associated facilities to build the science base across many areas of scientific research in both our higher education institutions and other public research organisations; and direct support to the enterprise sector to help individual companies to build their capacity for research and development.

This investment in scientific excellence has many positive impacts including powering an innovative and enterprising economy, creating high-value jobs, attracting, developing and nurturing business, scientists and talented people, and ensuring Ireland is connected and respected internationally.

The Government intends to build on this success. We are keeping science centre stage by ensuring that it delivers for the economy and society.

We draw much encouragement from the fact that Ireland has enhanced its standing in global research by steadily building a very credible research base, particularly over the past decade and more. Our publication rates have doubled, for example, with Ireland’s citation rates now surpassing US and EU averages.

Government budget expenditure on research and development increased from €504 million in 2002 to €823 million in 2011.
Moreover, 3,200 new scientific posts have been created in our Third Level Institutions in this time, which are now more aligned to industry needs, and, in parallel, Business Expenditure on R&D has increased significantly.

The Government’s strategy is to accelerate the economic and societal return on our science, technology and innovation investment, to further strengthen enterprise engagement and take-up of public research and to drive commercialisation.

In recent years it has been a very challenging task to try to maintain support for research and innovation in the face of a severe economic crisis. Many people might think that this type of investment is a luxury that Ireland cannot afford. In contrast, the Irish Government firmly believes that investment in Research and Innovation is a critical part of our economic recovery. We have already identified key areas for our national investment in research through our national Research Prioritisation exercise, which also links closely to the themes of Horizon 2020.

The Research Prioritisation report identified nanotechnology as an enabling toolkit which has a broad impact across multiple sectors. The main markets enabled by nanotechnology include the aerospace, automotive, construction, electronics, energy and environment, manufacturing, medical and pharmaceutical and oil and gas markets.

Sustaining the manufacturing sector into the future in Ireland and across Europe is fundamental for economic prosperity. The next generation of manufacturing industries require continual and radical innovation focused on processing technologies and utilisation of novel materials. There is currently a low absorptive capacity for new technology in many of the small and medium sized manufacturing firms based in Ireland. Government intervention can act as a network facilitator between industry and the knowledge providers across the higher education sector.

Engagement with industry on these issues will help researchers in the higher education sector to give their research programmes the appropriate focus. An intervention of this nature will assist in the cross fertilisation of knowledge between the traditional and modern manufacturing companies based in Ireland.

Successful implementation of this opportunity will result in the technological upgrade of the traditional manufacturing base, assist in attracting and retaining foreign owned manufacturing companies and upskill the workforce.

**The importance of Nanotechnology and Nanoscience**

With this audience, I realise that I am preaching to the converted but not all are aware 'Nanotechnology" is the brand new frontier of technology in Europe and in the world.

Prominent voices around the world praise the value that they would bring to society and economy, insisting that the value creation process starts from research and continues with the establishment of an exploitable portfolio of technologies. This in turn would drive numerous applications in manufacturing, energy, environment, healthcare, transport and electronics.

World-wide, Nanotechnology impacted $254 billion worth of products in 2009 and this impact will grow to $2.5 trillion in 2015! In short we need nanotechnology for societal benefits and for economic benefits.
Ireland and Nanotechnology

Ranked sixth in the world for nanoscience research and eighth for materials science research, Ireland is now recognised as a leading nanoscience nation.

With over 90 per cent of the world’s medical multinationals and 70 per cent of the world’s technology multinationals having a base in Ireland, our national research credentials are extremely attractive, and crucial to the economy.

It is estimated that nanoscience is linked to €15 billion, or 10 per cent, of Ireland’s annual exports and supports 250,000 jobs nationwide. The Government has targeted 20,000 more manufacturing jobs in Ireland by 2016 and, undoubtedly, Ireland’s leading nanoscience research can help to create those jobs.

To all of you here today, I hope you find ENF 2013 a productive conference. I know there is a wide range of assistance available and waiting to be tapped into for those who wish to ensure that Nanotechnology is at the core of innovation. Ireland is open for business on all fronts and the agency executives that you will meet over the next three days will be delighted to assist you in every possible way.

ENDS