Il 3 giugno 2004 è stato inaugurato a Genova, presso la Facoltà di Ingegneria, il primo centro universitario di ricerca Rolls-Royce realizzato in Italia. In questo centro opereranno congiuntamente tecnici specialisti della Rolls Royce e ricercatori e professori dell'Università, conducendo ricerche tecnologiche dedicate a sistemi per la produzione di energia elettrica basati su celle a combustibile a ossidi solidi. Il centro è stato inaugurato alla presenza del Viceministro on. Guido Possa.

Inaugurazione presso la Facoltà di Ingegneria dell'Università di Genova del "Rolls Royce fuel cell system university technology center"

Intervento del viceministro dell'Istruzione, dell'Università e della Ricerca on. Guido Possa

Genova, Facoltà di Ingegneria, Villa Cambiaso, 3 giugno 2004

It is truly for me a great pleasure to be here today on the occasion of the launch of the University Technology Centre dedicated to Fuel Cell Systems.

First of all, let me address a warm welcome to the friends coming from the Rolls Royce Headquarter and from the Rolls Royce Fuel Cell Systems, who are promoting and directly supporting this University Technology Centre.

We all in Italy appreciate very much that Rolls Royce, one of the greatest high tech firms of the world, world leader in the market of several major products, in the framework of its research strategy of establishing a network of collaborations with the Universities, has taken in full freedom the decision to establish one of its University Technology Centres here at the Engineering Faculty of the University of Genova.

It is not by chance that Rolls Royce has chosen the University of Genova for the UTC on Fuel Cells. Prof. Vernazza and prof. Massardo told me how this collaboration between Rolls Royce and the Engineering Faculty of the University of Genova gradually developed with time within the framework research programs of the European Commission. This relationship has therefore to be considered as a genuine outcome of the european research policy, which has always promoted international connections within the European Union. But there is no doubt that the decisive contribution is to be attributed to the level of excellence reached in the field of solid oxide fuel cells by the team of professors and scientists of the University of Genova led by professor Massardo. I wish to explicitly acknowledge here this great achievement and congratulate professor Massardo and his colleagues.

The initiative deserves our full appreciation because of the deep effects it will produce in the Faculty over time:

- a strong stimulus to scientific excellence,
- all the benefits of the collaboration with one of the most advanced high tech firms in the world,
- the promotion of the internationalization of the Faculty research culture,
- the convergence on the theme of the collaboration, i.e. power systems based on solid oxide fuel cells, of a gradually increasing number of University research activities, thus developing synergies and promoting interdisciplinary approaches. I know that already two Departments of the Faculty are involved in this collaboration.

I have to underline that all these qualities, scientific excellence, collaboration with industry, internationalization, concentration of research efforts, interdisciplinarity, so often lacking in our Universities, are explicitly considered as the main objectives to be promoted and to be developed by the official Government guidelines for research activity in the Universities and in the public research centres.

The innovative products subject of this collaboration, i.e. stationary power generation systems based on solid oxide fuel cells, are very intesting, given in particular the great variety of usable fuels and the high efficiency of conversion of chemical into electrical energy. In addition to the key technology of the solid oxide fuel cells, a complex technology indeed, several other delicate technologies find here application, such as the technology of steam reforming (for the hydrogen production from the fuel) and the technology of microturbines (for the energy extraction from the hot steam and gases outcoming from the fuel cell). All these technologies have to be applied in innovative ways in the fuel cell power systems here considered. The development of these products requires therefore a proper integration of many

engineering disciplines. The collaboration with Rolls Royce has thus the potential of involving several engineering departments of the Faculty.

A last remark. In Italy the high tech manufacturing industry has played an important role in the economy for a great part of the last century. Still in the sixties many large Italian firms were active and vital (also abroad) in several fields, such as chemistry, pharmaceuticals, electrical machinery, steam turbines, turbo-machinery, steam boilers, steel industry, computer and office automation, aeronautics, consumer electronics, shipbuilding industry. The relationships and the interactions between these large firms and our Universities were strong and produced a lot of very positive consequences. One example only: the invention of the moplen (the isotactic polypropylene) by the Nobel Price prof. Natta at the "Politecnico di Milano", in strict collaboration with the research laboratories of the firm Montecatini. However, in less than four decades most of these large firms drastically reduced their size or even disappeared. This happened for a variety of reasons (mainly political). The consequences of this ruinous process of deindustrialization are heavily pending on the present and future of our Country. One of the most negative consequences regarded and regards our Engineering Universities, which experienced a drastic reduction of their relationships with industries and a dramatic impoverishment of their research activities.

Taken all these aspects in due account, the collaboration between Rolls Royce and the University of Genova appears to me very interesting and valuable. It is the first example of a new solution to the problem of the relationships between Industry and the Universities, especially the Engineering Universities, relationships which are such a vital necessity for both. This solution is born in the new European context, which developed during these last years, and is very well respondent to the requirements of the globalization process. I strongly hope that other centres of excellence of the Italian Universities could establish in the next future similar collaborations with high tech world leader firms.

And now the wish: "Buon lavoro a tutti!"