

Mr. Lehendakari, President of the Regional Council, Minister of Industry, Trade and Tourism, Minister of Education, Universities and Research, State Secretary of Research, other authorities, friends, I would like to welcome you all and thank you for being here at the opening of the nanoscience cooperative research centre nanoGUNE Consolider.

Whilst I was at the University of Cambridge, in early 2005, I was given the opportunity to launch the design of a new research centre that would be called nanoGUNE. That idea was at the heart of a strategy set up by the Ministry of Industry, Trade, and Tourism of the Basque Government and of an initiative promoted by the Donostia International Physics Center led by Pedro Miguel Etxenike. At the end of that academic year, and back in the Basque Country, I set to work, and several months later, on 28th February 2006, nanoGUNE was legally established as a non-profit making association. I was appointed General Director of the Association that very same day. So, firstly, I would like to express my gratitude for the trust that was placed in me to lead such an exciting project. To the Ministry of Industry, Trade and Tourism of the Basque Government, the Donostia International Physics Center, the Tecnalia Corporation, the IK4 Alliance, the University of the Basque Country, and the Regional Council of Gipuzkoa: thank you all for your support and involvement in the creation of nanoGUNE. I would also like to thank the Department of Education, Universities, and Research of the Basque Government for its support, and particularly the Ikerbasque Foundation for the excellent work done in the process of hiring various of our researchers.

In early 2006, thanks to the generous effort of various research groups at the Donostia International Physics Center, the Polymat Institute of the University of the Basque Country, and the Tecnalia Corporation and the IK4 Alliance of Technological Centres, we were able to launch a proposal, in record time, in the first call of the Consolider-Ingenio 2010 Programme that had been set up by the Spanish Ministry of Education and Science. Our proposal was approved in June, and consequently nanoGUNE adopted the name CIC nanoGUNE

Consolider, becoming the first centre in Spain to achieve this recognition. I would like to thank the Spanish Ministry of Science and Innovation for all its support through the Consolider Programme, as well as the excellent management of funds obtained by the Basque parliamentary group. At this point, I would like to proudly (although not conceitedly) share with all of you some phrases from our Consolider proposal assessment report:

“The proposed centre approaches in size, scope, and versatility any of the five nano-centres of the US Department of Energy currently under construction at National Laboratories. The centre could become highly visible in the US and Europe. The research plan and the scientific and managerial qualifications of the Principal Investigator are equal to the best existing and proposed centres that I am familiar with. Overall, this is a project of the highest quality.”

We should be proud of this report. This report is issued by an assessment committee of international experts and also represents the recognition of the work of several research groups in the Basque Country who have made the creation of nanoGUNE possible. And it is more than that, it is a real challenge, a solid commitment to continue growing, and for nanoGUNE to help situate the Basque Country among the leading countries in nanoscience and nanotechnology.

On 1st September 2006, a date which we call ‘day zero’, I began my work as Director of nanoGUNE, without fully leaving my responsibilities at the University. I would like to express my most heartfelt thanks to the first person who agreed to form part of my team: Igor Campillo believed in me and my project, and from the very outset he has been a great support to me in every way. Igor is currently the person in charge of the nanoBasque agency that was created last month. My most sincere thanks to all those people who work in my team; everything we have achieved, I owe to you.

My heartfelt thanks also go to the Technology Park of San Sebastian, and in particular its director, Joakin Telleria, for purposely and efficiently fitting out the space we needed to set this project up in its early days, when we had absolutely nothing.

We had our first headquarters at Miramon and that is where everything was started up. However, we knew from the very beginning that a centre such as nanoGUNE had to seize the opportunity that we had to secure its definitive location at the Ibaeta Campus of the University of the Basque Country. This campus already has an international focus in different fields of physics and chemistry closely related to nanoscience and nanotechnology and, consequently, we were convinced that the location of a centre such as nanoGUNE, which will combine basic research with the objective of boosting market opportunities based on nanotechnology, in this privileged university setting would make a substantial contribution to the creation of a positive framework that would remove barriers between the academic and business worlds.

Consequently, I would like to thank Juan Ignacio Pérez Iglesias, former Rector of the University of the Basque Country, and Cristina Uriarte, Vicerector of the campus of Gipuzkoa, for allowing us to use this plot of land at the Ibaeta campus and also for speeding up the processes to grant that use, since we were able to do everything with unprecedented speed.

The equipment necessary to carry out excellent research in the field of nanoscience and nanotechnology require the construction of a building that is properly isolated from external disturbance (vibrations, noise, electromagnetic radiation, and dirt) that would prevent us from obtaining the precision required on the nanoscale. Hence, we proceeded with the construction of a building that includes avant-garde architectural and engineering solutions.

This has been possible thanks to the efforts of a complex team. The Barcelona-based San Sebastian architect, Javier San José, took on the general design of the building, and the engineering side was commissioned to IDOM.

Wilson architects from New England were responsible for a Basis of Design establishing specific architecture and engineering criteria and for the part of the construction project corresponding to the laboratories. Colin Gordon Associates from California performed on-site measurements and dynamical-structure calculations that allowed us to comply with the required conditions for vibration and acoustics in the laboratories. Vitatech Engineering from Virginia assessed us with issues related to the electromagnetic environment, taking into account not only the external sources of interference but also the position of the lifts and all electrical and mechanical facilities as well as the configuration of the scientific equipment. And the Abbie Gregg firm from Arizona was responsible for the design of a state-of-the-art clean room. The general management of the project was given to IDOM and the technological centre Labein-Tecnalia was in charge of quality control.

The result of all that work is this recently-completed, remarkable building that is in keeping with the centres of reference that we have had the opportunity to visit around Europe and the USA. At the end of this ceremony, we will take a walk around the building and the details of its design and structure will be explained.

At this point, I would like to thank the members of our International Advisory Committee, experts in various areas of nanoscience and nanotechnology. Sir John Pendry, from Imperial College in London, who chairs the committee, Jose Antonio Maiz, Intel Fellow in the USA, John Pethica, Founding Director of the recently inaugurated centre for Research on Adaptive Nanostructures and Nanodevices in Dublin, Emilio Mendez, Director of one of the five nanocentres funded by the Department of Energy and constructed recently in the USA, the Center for Functional Nanomaterials at Brookhaven National Laboratory in New York, Angela Belcher, from MIT, the Massachusetts Institute of Technology, and the Nobel prize winners Jean-Marie Lehn and Heinrich Rohrer. We have benefited immensely from their advice and their active participation in the

process of hiring researchers and building a centre that we would like to place among the leading research centres in the world.

We have succeeded in putting together five research groups, as many as we had been planning to build for the first stage of our activity. These groups, which are intended to open new areas of strategic research in the Basque Country in the fields of nanomagnetism, nanooptics, self-assembly, nanobiotechnology, and nanodevices, will be led by excellent scientists coming from all over the world (the USA, Germany, France, and England) that, attracted by the expectation generated by the launch of a promising multi-disciplinary centre in a country that is committed to research as a driving force for development, decided to choose our project, leaving behind their current positions and declining offers in other parts of the world. They trusted our project and I am grateful for that.

nanoGUNE, the nanoscience cooperative research centre in the Basque Country, is one of the basic mainstays of the nanoBasque Strategy which is part of the Basque Government's Plan for Science, Technology, and Innovation. nanoGUNE therefore starts out with the following mission: to carry out world-class research in the field of nanoscience and nanotechnology, and to build a solid knowledge community with the intention to transfer the results of research onto an industrial sector that needs to become increasingly more competitive and with the firm objective of increasing the Basque Country's economic growth and industrial competitiveness. As a cooperative research centre, it also strives to create an efficient framework of cooperation that provides capacities of excellence in areas of nanoscience and nanotechnology, as well as coordinate the activities carried out by a range of agents in the Basque Country, optimising resources and accumulating critical masses.

There are ways to measure the scientific success of a centre as ours, and we hope to situate ourselves at the head of the world ranking, but to do so with a definite commitment to lay down the bases on which the Basque industry of the future will be driven, which must inevitably be knowledge-intensive.

Nanotechnology is currently accepted as one of the driving forces behind economic growth in the 21st century, apart from being one of the key factors of sustainability that cannot fail to mark the future development of humanity. The road ahead is long and uphill: one needs to understand new phenomena and master the manipulation of matter on a nanometer scale; one also needs to be capable of designing and creating materials, devices, and systems through controlling matter at that scale. Researching the small and extracting technological performance that can be converted into new products and more efficient processes, whilst at the same time being sustainable, is a huge challenge. This challenge is currently being taken on by the most advanced countries in the world and by those that expect to occupy a prominent place in the future. There is no doubt that this represents a big challenge for a small country, the Basque Country, which is currently aiming at becoming the innovation reference in Europe. Without recurring to false optimism, we are convinced that the future of nano is a promising one, and we wholeheartedly back the Basque Government's strategic commitment to this field with the creation of nanoGUNE. We will compete and collaborate with many other research laboratories around the world until we find the space that will allow us to offer something different. When we do so, we will be contributing with our small size to creating the necessary conditions for the humanity to benefit from a wide range of nanotechnologies.

Finally, I would like to recall the words said by Pedro Miguel Etxenike when he was awarded the Gold Medal of the City of San Sebastian in the year 2000: "Let us all come together to place solid foundations so that in a not-too-distant future, San Sebastian, already equipped with excellence in so many other areas, may be considered an eminent city of knowledge on an international level". Following Pedro's wishes, here we offer our contribution for our country, and San Sebastian in particular, to be considered at the cutting edge of Science and Technology around the world.

This is the big challenge of the small.

I would like to thank all members and former members of the Board of Partner, the Basque Government, for promoting this project from the very beginning, and in particular the Minister of Industry, Trade, and Tourism, Ana Aguirre, and her team. Mila esker guztioi, muchas gracias a todos, thank you very much for your attention.