



Inauguration of the Mir-Puig Building

The result of a historic philanthropic donation to Catalan science from the Mir-Puig Foundation

February 05, 2025

The President of the Generalitat of Catalonia, accompanied by the Consellera of Research and Universities, the Mayor of Castelldefels and the Rector of the UPC, officiates the inauguration of ICFO's new building in the Mediterranean Technology Park campus, built entirely thanks to an exceptional philanthropic donation from the Mir Puig Private Foundation.

The President of the Generalitat de Catalunya, Salvador Illa, accompanied by the Consellera for Research and Universities, Nuria Montserrat, the Mayor of Castelldefels, Manuel Reyes, and the Rector of the UPC, Daniel Crespo, officiated today the inauguration of the Mir-Puig building that with 4400m2 of surface, significantly expands ICFO's facilities in the Mediterranean Technology Park of Castelldefels. The president of the Mir-Puig Foundation, Jordi Segarra, the entity that donated the building, represented the philanthropic entity at the event.

The Mir-Puig building, designed for state-of-the-art photonics technology laboratories, is a unique philanthropic contribution in Spain. The late **Dr. Pere Mir i Puig, founder of the Cellex and Mir-Puig Foundations**, agreed to finance the project as a strategic advancement for ICFO's research spaces and programs. This donation builds on the support that made possible ICFO's Cellex-Nest building, inaugurated in 2012, which marked a crucial step forward for the institution at the time. The combined gifts from the Cellex and Mir-Puig Foundations to ICFO represent the largest philanthropic donation to science in Spain. Among other laboratories, the new building includes the **NM3 infrastructure, co-financed by the Singulares program of the Generalitat of Catalonia** with the support of several Foundations, including the Cellex Foundation and the Gordon and Betty Moore Foundation. NM3 includes a laboratory for the fabrication and characterization of nano-optoelectronic materials. The infrastructure is vital to ICFO's research programs and collaborations, providing state-of-the-art instruments and equipment that allow researchers to carry out world-leading innovations in photonic sciences.

The NM3 Nanofabrication laboratory has a 600m² clean room area and service and storage spaces. Inside the clean room, cutting-edge techniques are used to design and manufacture photonic chips with nanometric structures for applications as diverse as optoelectronics, automotive, telecommunications, biomedicine, photovoltaics, and quantum technologies, among others. The infrastructure is one of the key components that **made it possible for the European Commission to choose ICFO to coordinate PIXEurope, the new pilot line of advanced photonic integrated chips funded by the EC's Chips Joint Undertaking initiative with a total budget of approximately 400 million euros**

In addition to the NM3 infrastructure, the Mir-Puig building hosts several strategic projects in quantum technologies, such as the Quione II quantum computer, an analogue quantum computer unique in the world in the technology it uses, and which will be dedicated to exploring the properties of quantum materials. The building also hosts research programs in cybersecurity and quantum communications, photonic chips and projects from the ICFO Clean Planet program, initiated with the philanthropic support of the Joan Ribas Araquistain Foundation. The Clean Planet program aims at providing sustainable solutions to the development of industrial processes and energy generation, exploring photonic technologies for carbon capture systems, solar energy generation as well as the fundamental processes related to photosynthesis in plants, among others.

