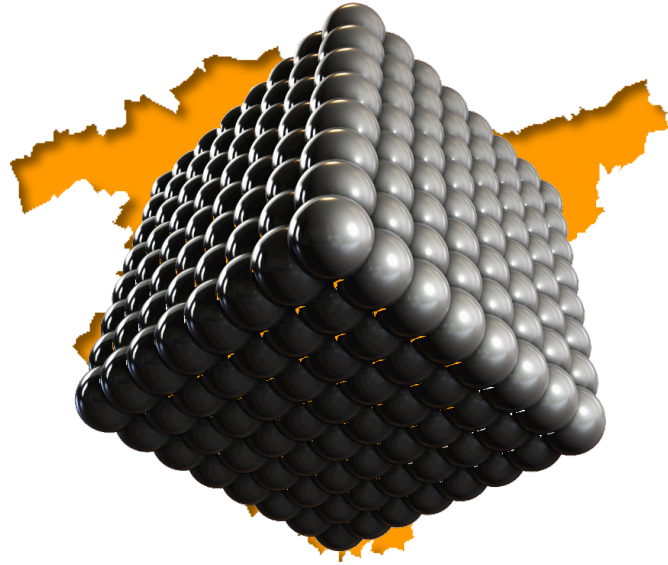




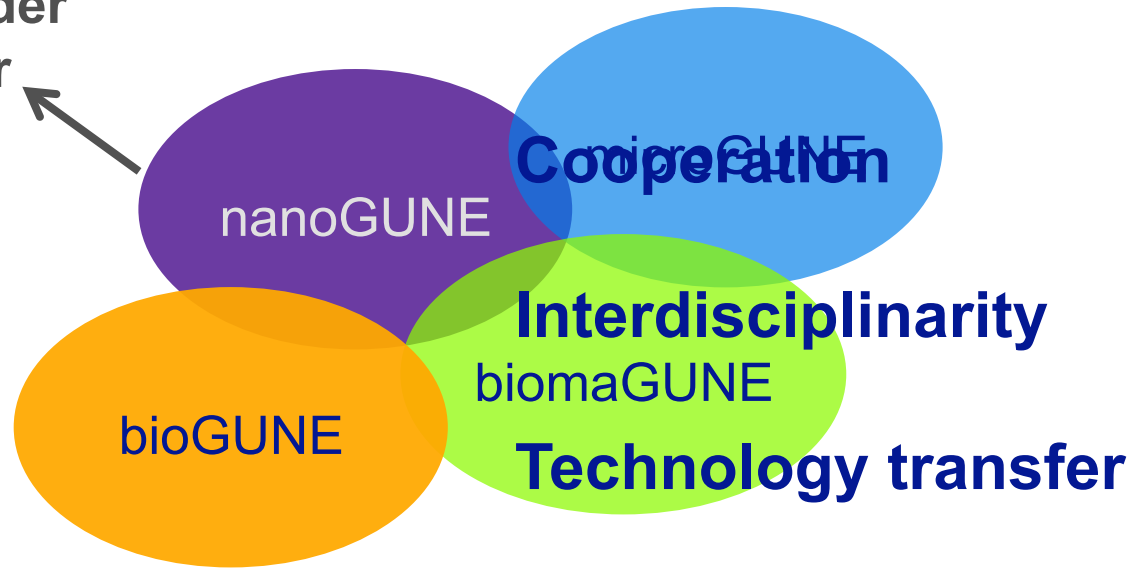
The Big Challenge of the Small



nanoBasque Strategy
From Science to the Market



Consolider
Center



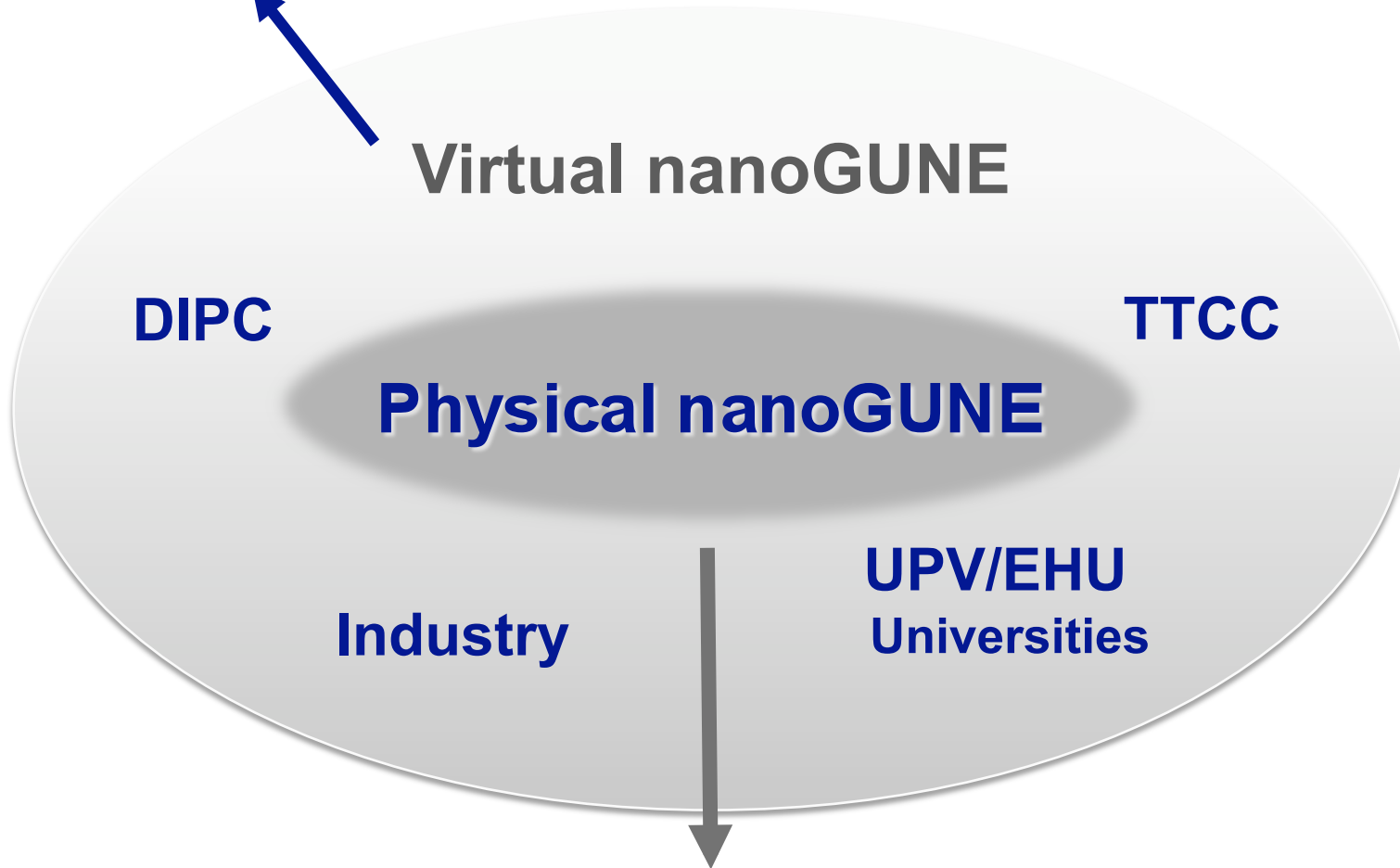
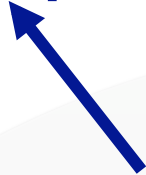
Cooperative Research Centers

The background is a deep blue with a complex, abstract pattern. It features several glowing, fiber-like structures that resemble DNA or nanotechnology. These structures are composed of small, rounded segments and are illuminated from within, creating a bright blue glow. The fibers are set against a backdrop of soft, white, ethereal light trails that swirl and flow across the scene, giving it a sense of dynamic energy and movement.

To perform **world-class** nanoscience
research for the **competitive growth**
of the Basque Country



**Cooperation among
existing groups**



Virtual nanoGUNE

DIPC

TTCC

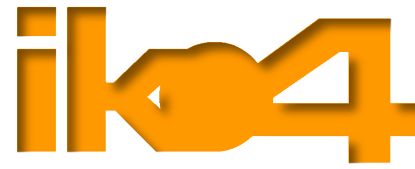
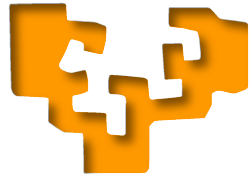
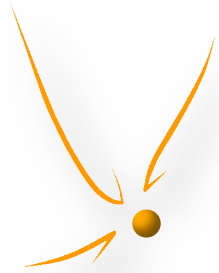
Physical nanoGUNE

Industry

**UPV/EHU
Universities**

Newly created





Non-Profit Association
28 February 2006



J. B. Pendry
Imperial College, UK



J. A. Maiz
Intel, USA



E. Mendez
Brookhaven, USA



J. Pethica
CRANN, Ireland



H. Rohrer
Switzerland

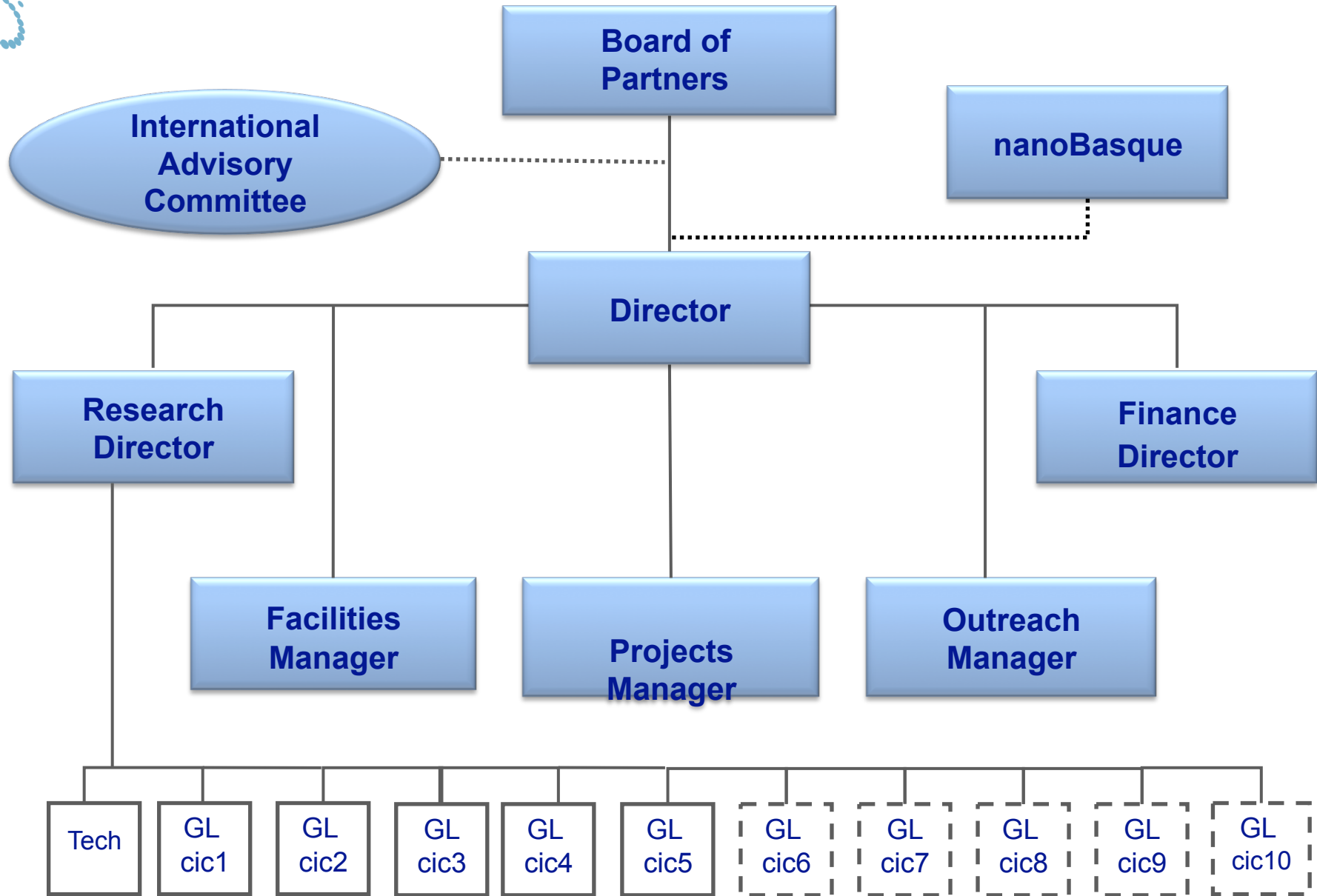


J. M. Lehn
Strasbourg, France



A. Belcher
MIT, USA

International Advisory Committee





Escala mundial



Openings



CIC1
Nanomagnetism

CIC2
Nanooptics

CIC3
Self-Assembly

CIC4
Nanobiotechnology

CIC5
Nanodevices

Groups



By 2009

5

Group Leaders

5

Post-docs

10

Graduate Students

Research Team

5

Technicians



By 2010

35

Researchers



By 2015-2020

100

Researchers



CIC1

Nanomagnetism

Andreas Berger



- ✓ **University of California San Diego**
- ✓ **Argonne National Laboratory, Illinois**
- ✓ **IBM and Hitachi, San José, California**



CIC2

Nanooptics

Rainer Hillenbrand



✓ **Max-Planck, Munich**

Ikerbasque



CIC3

Self-Assembly

Alexander Bittner



- ✓ **Ecole Polytechnique Federale de Laussane (EPFL)**
- ✓ **Max Planck, Berlin**
- ✓ **Max Planck, Stuttgart**

Ikerbasque



CIC4

Nanobiotechnology

Igor Nabiev



- ✓ **Shemyakin-Ovchinnikov Institute, Moscow**
- ✓ **University of Pittsburgh, USA**
- ✓ **Georgia Technological Institute, USA**
- ✓ **Reims University, France**

Ikerbasque



CIC5

Nanodevices

Luis Hueso



- ✓ **University of Cambridge, UK**
- ✓ **Italian National Research Council, Italy**
- ✓ **University of Leeds, UK**

Ikerbasque



2009

Director
JMP

Research Director
A. Berger

Nanomag	Nanoop	Self-Assem	Nanobio	Nanodev	Tech
A. Berger	R. Hillenbrand	A. Bittner	I. Nabiev	L. Hueso	R. Gay
P. Vavassori	A. Huber	Open post-doc	A. Sukhanova	F. Casanova	D. Lauvernier
O. Hovorka	J. Stiegler	W. Nuansing	C. Mendicute	A. Mahmood	
J. M. Porro	M. Schnell	A. Ali	S. Poly	M. Gobbi	
O. Idigoras	Open tech.	A. Rebollo	Open pre-doc	R. Zazpe	
C. Rufo			M. Fertin	R. Llopis	
M. Grimsditch			A. Govorov		

Research Team



The Nanoscience Cooperative Research Center **CIC nanoGUNE Consolider** (www.nanogune.eu) invites applications and nominations for a position as

Staff Scientist

CIC nanoGUNE Consolider, located in San Sebastian, Basque Country (Spain), is a R&D center created recently with the mission of conducting basic and applied world-class research in nanoscience and nanotechnology, fostering training and education excellence, and supporting the growth of a nanotechnology-based industry.

At the present time, nanoGUNE is welcoming applicants with an outstanding track record of research in **electron microscopy**. While all professional profiles will be considered independent from the field of specialization, we are particularly interested in a hands-on type scientist, whose true expertise and passion is in leading-edge experimentation in the field of transmission electron microscopy. Proficiency in spoken and written English is compulsory; knowledge of Spanish is not a requirement.

Applicants should forward their CV, a summary of research interests, and a list of at least three references to director@nanogune.eu

Closing date: **15 March 2009**





Nanomagnetism (A. Berger)

Fabrication of multilayered magnetic materials

Fabrication of magnetic nanostructures

Magnetization reversal, dynamics, and characterization

Research Laboratories



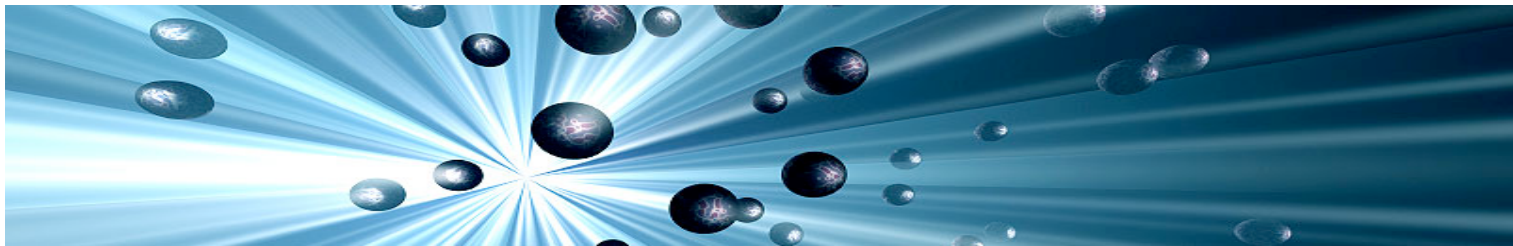


Nanooptics (R. Hillenbrand)

Near-field optical nanospectroscopy

Materials Science: Semiconductor technology and biology

Photonics: Optical antennas and metamaterials



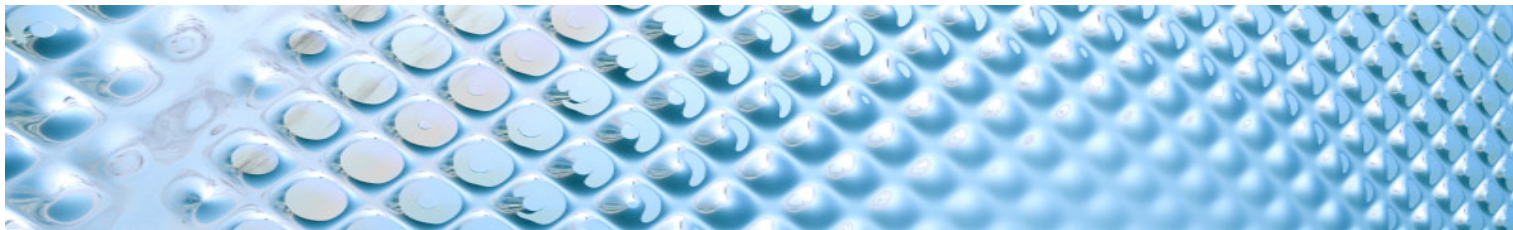


Self-Assembly (A. Bittner)

Plant viruses as scaffolds for nanoscale structures

Electrospinning of self-assembling biomolecules to fibers

**Porus carbon electrodes for electrochemical capacitors
and batteries**





Nanobiotechnology (I. Nabiev)

Biodetection and diagnostics

Energy transfer in hybrid nano-bio materials





Nanodevices (L. Hueso)

Carbon-based spintronics

Non-volatile memory devices

Complex materials





	Laboratory	Tool
CIC 1	Nanomagnetism	Sputter deposition MOKE SQUID Magnetometer
CIC 2	Nanooptics	SNOM
CIC 3	Self-Assembly	Electrospinning
CIC 4	Nanobiotechnology	Confocal Laser Microscope Cell Culture
CIC 5	Nanodevices	UHV evaporator Variable temperature probe station
All Groups	Cleanroom	e-beam writer Mask aligner Ellipsometer Reactive Ion Etcher ALD
	Microscopy	STM/AFM/MFM Confocal Raman Microscope HR-TEM Dual Beam FIB
	Common Tools	PPMS XPS, XRD



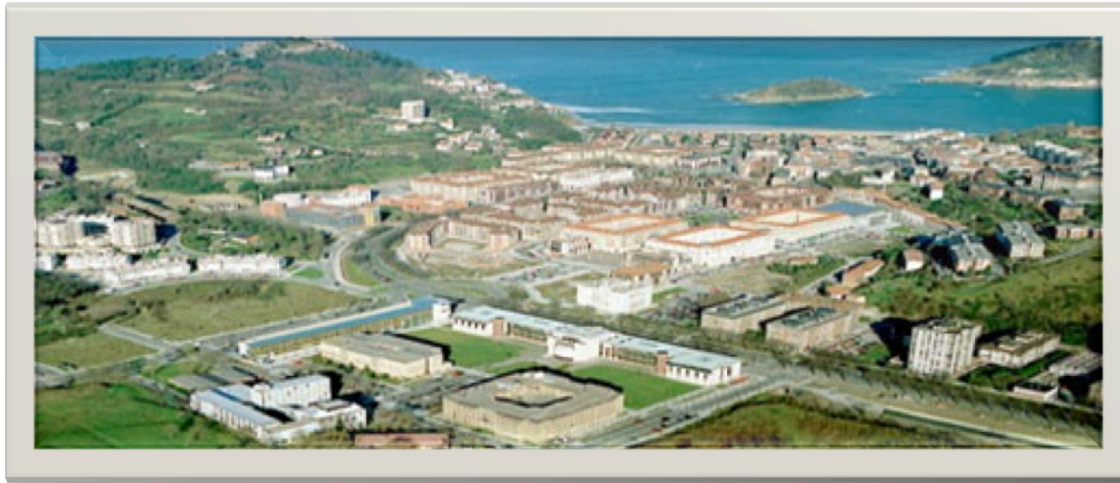
San Sebastian



Location

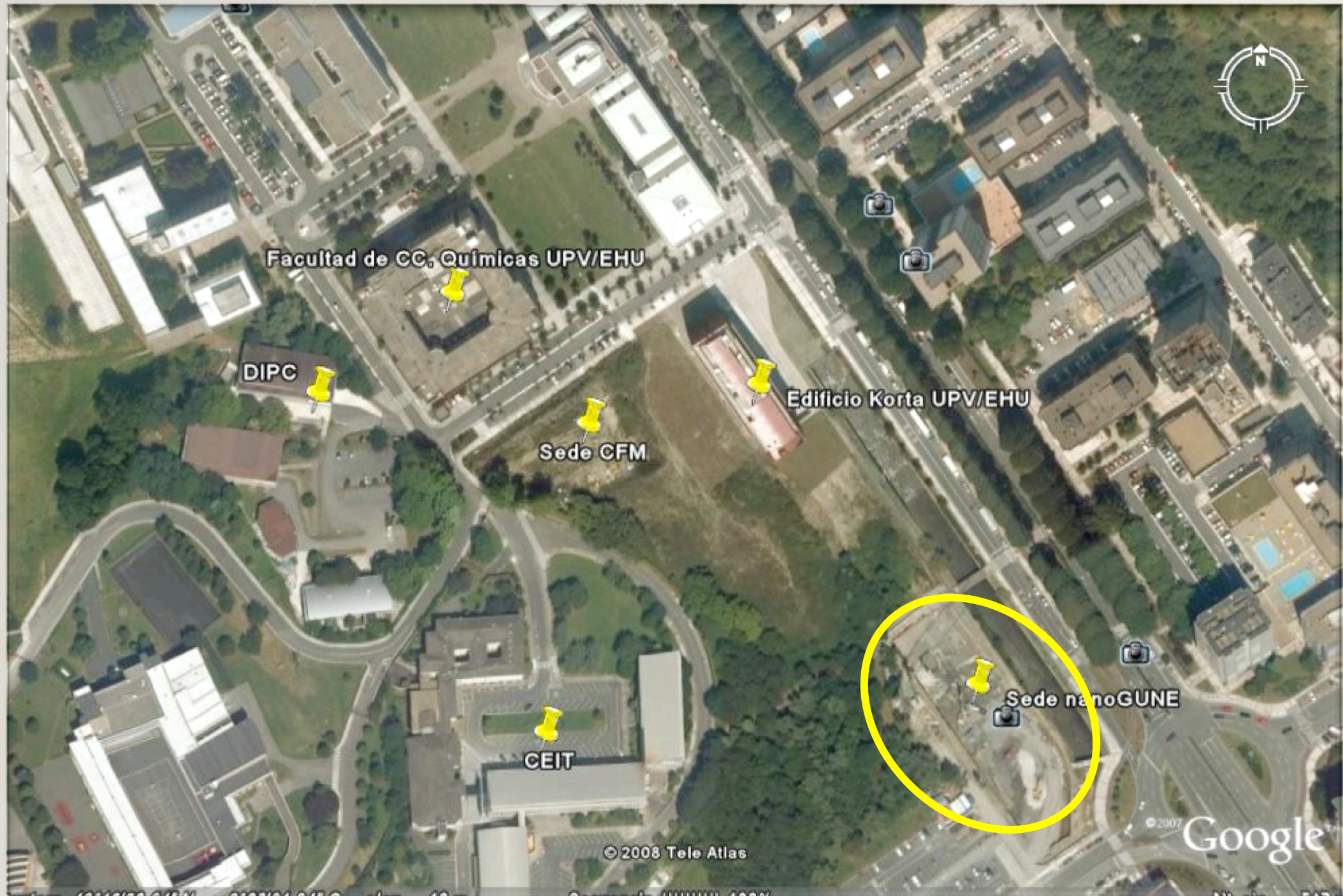


Campus of the UPV/EHU



Inauguration: Jan 2009





Facultad de CC. Químicas UPV/EHU

DIPC

Sede CFM

Edificio Korta UPV/EHU

CEIT

Sede nanoGUNE

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Stage I - 2008 (6,200 m² + 2,800 m²)









e-beam room

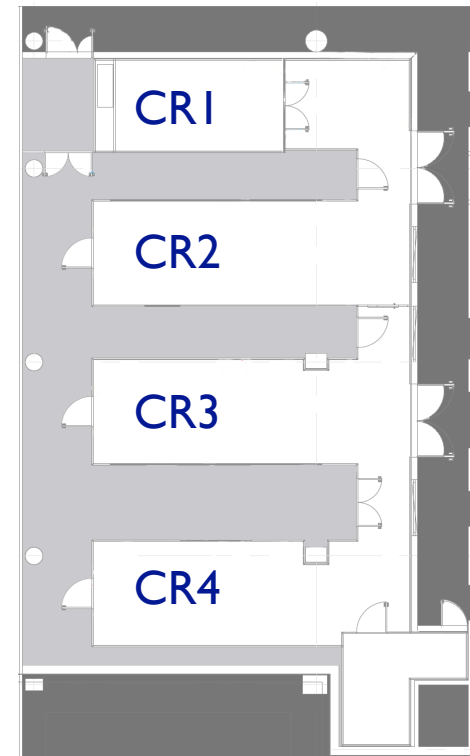
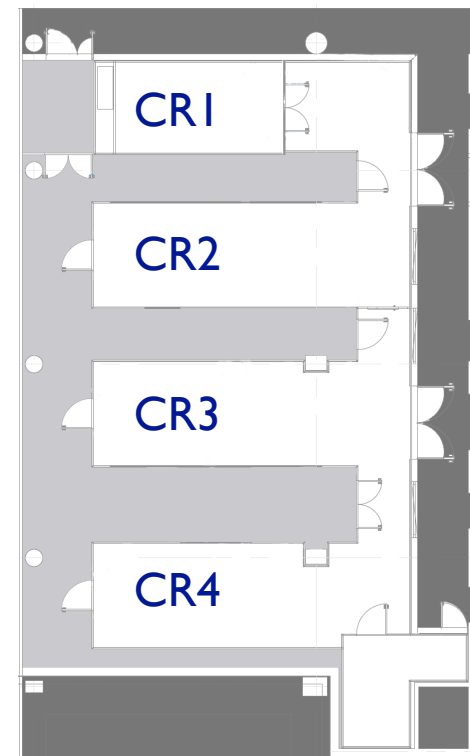
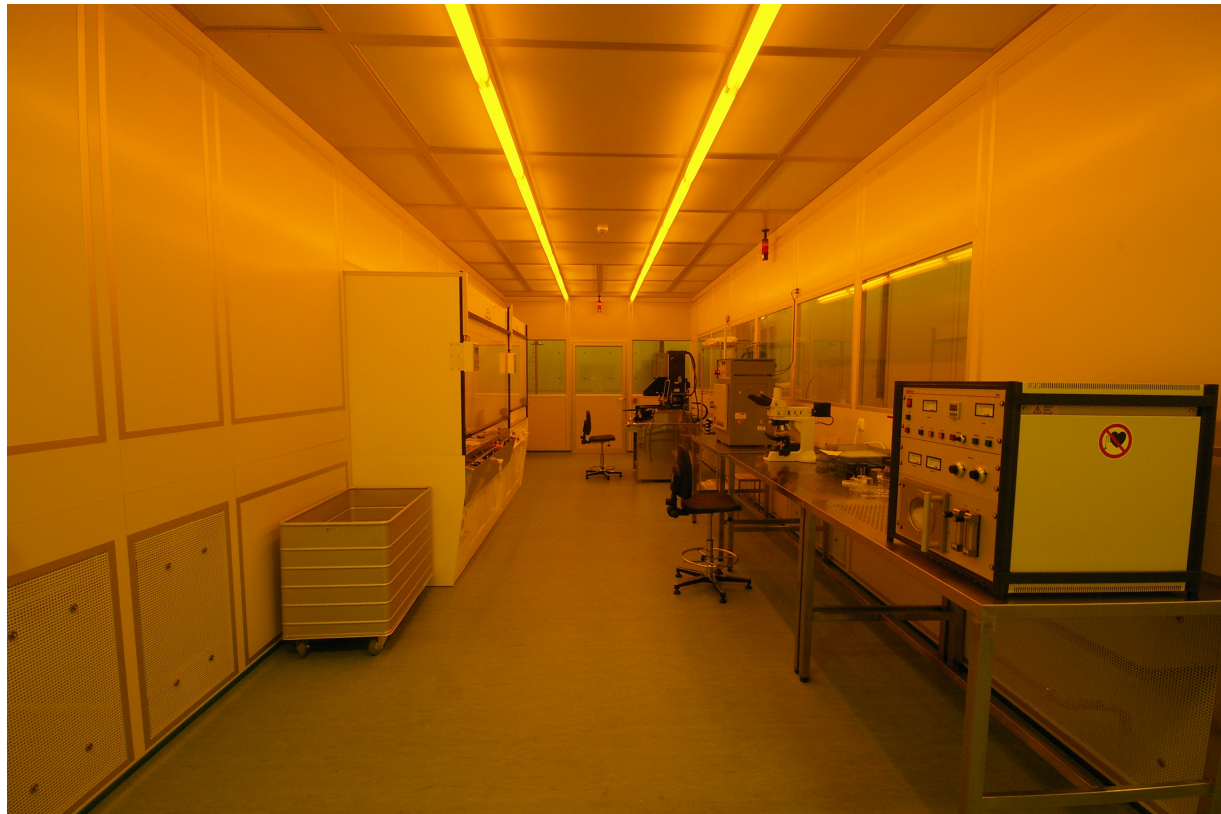


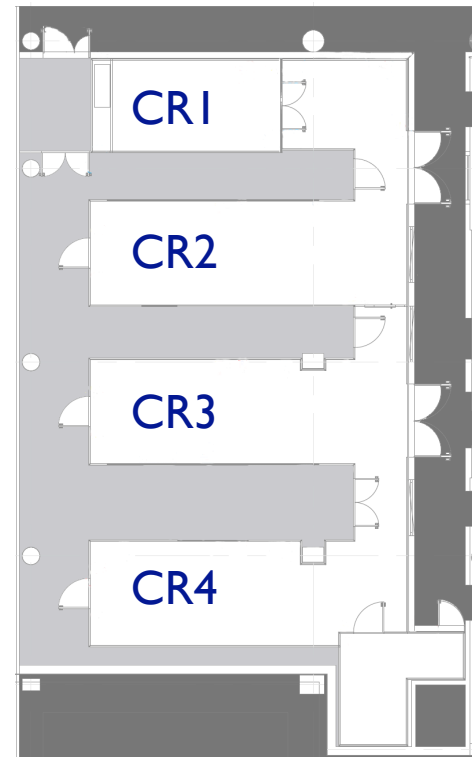


Photo bay



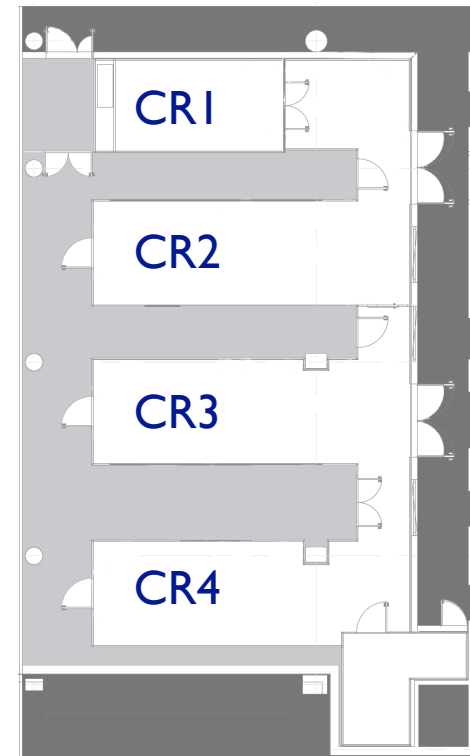


Etching bay





Deposition bay





The Big Challenge of the Small