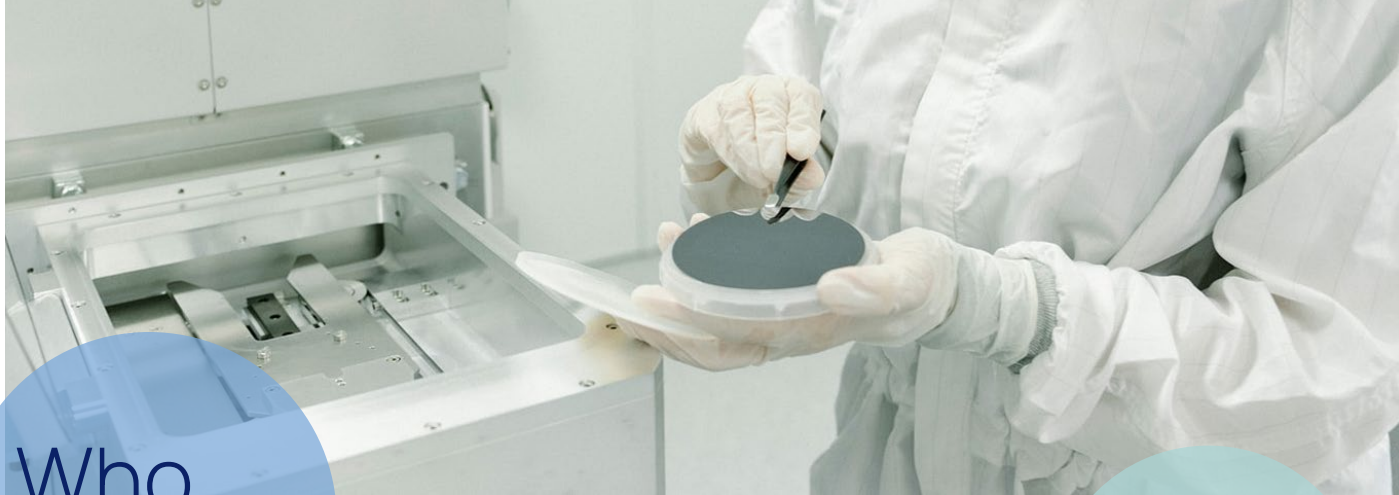


Catalan
Institute of
Nanoscience and
Nanotechnology

A Decade
of Impact:
Advancing Scientific
Frontiers through
Nanoscience



Who We Are

ICN2 is a public research institute pushing the boundaries of nanoscience to enhance societal wellbeing. Conducting fundamental as well as applied research, ICN2 explores the limitless possibilities of the nanoscale and brings new nano solutions to the market.

Why Nano Matters

A nanometre is a billionth (10^{-9}) of a metre. When we look at the world at this scale, materials behave differently – this is where new science and opportunities for new applications arise. ICN2 leverages this change in behaviour to develop new nanomaterials and nanodevices that have the potential to solve some of the world's most pressing challenges.



United by Nanoscience

ICN2 brings under the same roof researchers from a vast array of disciplines. From physics, chemistry, biology, engineering and beyond, our team is united by the focus on nano.

We pride ourselves on our broad approach to nanoscience, not restricting our focus to specific subject areas, but embracing the most promising of ideas, wherever they may come from. Our current work explores solutions in the fields of information and communication technologies, health, energy and the environment.

At ICN2 **diversity** is our added value



300+ staff



43% women



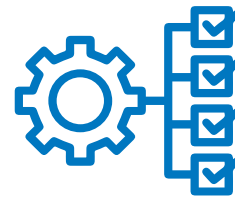
40+
nationalities



20 research
groups



3 research
support units



8 management
and support service
teams



Our Research Teams



Advanced Electron
Nanoscopy
ICREA
Jordi Arbiol

Advanced Electronic
Materials and Devices
ICREA
Jose A. Garrido

Atomic Manipulation
and Spectroscopy
ICREA
Aitor Mugarza

Inorganic Nanoparticles
ICREA
Víctor F. Puntes



Magnetic
Nanostructures
ICREA
Josep Nogués

Nanobioelectronics and
Biosensors
ICREA
Arben Merkoçi

Nanobiosensors and
Bioanalytical Applications
CSIC
Laura M. Lechuga

Nanoelectrocatalysis and
Sustainable Chemistry
ICREA
María Escudero Escribano



Nanomedicine
ICREA
Kostas Kostarelos

Nanostructured
Functional Materials
CSIC
Daniel Ruiz-Molina

Nanostructured Materials
for Photovoltaic Energy
CSIC
Mónica Lira-Cantú

Novel Energy-Oriented
Materials
CSIC
Pedro Gómez-Romero

In 2023 the ICN2 gathered 20 research groups and 3 research support units that together covered much of the breadth of nano research.



Oxide Nanophysics
ICREA
Gustau Catalán

Phononic And Photonic
Nanostructures
ICREA
**Dr Clivia M.
Sotomayor-Torres**

Physics And Engineering
Of Nanodevices
ICREA
Sergio O. Valenzuela

Supramolecular Nanoche-
mistry and Materials
ICREA
Daniel Maspoch



Theoretical and Computa-
tional Nanoscience
ICREA
Stephan Roche

Theory and Simulation
CSIC
Pablo Ordejón

Thermal Properties of
Nanoscale Materials
UAB
Javier Rodríguez-Viejo

Ultrafast Dynamics in
Nanoscale Systems
Klaas-Jan Tielrooi



Electron Microscopy Unit
CSIC
Belén Ballesteros

Instrumentation Unit
Gustavo Ceballos


Nanomaterials Growth Unit
CSIC
José Santiso

Our Work in Numbers

For over a decade, ICN2 has been committed to contributing to society through nanoscience. Here are some of our accomplishments, in numbers.



3 consecutive Severo Ochoa Centre of Excellence Awards
(2014 – 2026) accrediting ICN2 as international leaders in its field



11 spin-off companies created
(2014 – 2023) translating our research into real-world solutions



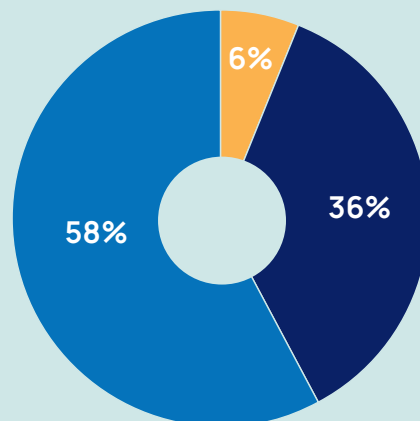
106 active European projects
(2014 – 2023) under the Seventh Framework Programme, Horizon 2020 and Horizon Europe funding programmes, including 12 European Research Council and 7 European Innovation Council grants

In **2023 alone**, ICN2 published **178** articles in indexed journals and **104** publications directly contributed to advancing progress toward **7** of the United Nations Sustainable Development Goals.

Our Financials in 2023

€16M+ total operating funds from

- 58% Competitive Funds
- 36% Generalitat de Catalunya and Spanish National Research Council
- 6% Industry and Services



A Message From Our Director Prof. Pablo Ordejón

“ As we celebrate a decade since ICN2’s creation in 2013, we are proud of the significant scientific breakthroughs that we have achieved. Looking ahead, our strategic focus on **sustainability** is set to drive our efforts to new heights, benefiting society as a whole. By addressing global challenges in Medicine, Energy-efficient Information Processing and Sustainable Energy Technologies, we are transforming fundamental research into innovations with real-world impact. **I invite you to explore our remarkable achievements**, evidence of the collective brilliance and dedication of the ICN2 community.



Pablo Ordejón
Director of ICN2

**Read more about
our achievements**



At ICN2, we transform the smallest of technologies into the biggest of innovations.

Join us as we continue to push the boundaries of science and create a better world, one nanoparticle at a time.



ICN2 Building, UAB Campus
08193 Bellaterra (Barcelona)
+ 34 937 372 649
info@icn2.cat
www.icn2.cat

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Activity supported by the grant CEX2021-001214-S, funded by MCIU/AEI/10.13039/501100011033

