

Why ASCENT+?

- ASCENT+ will **address emerging research challenges in Nanoelectronics** and enable a smooth consistent transition of the European industry to a new era.
- ASCENT+ **offers an unparalleled opportunity to users**, empowering them to respond to new problems and to advance knowledge and technology through generating novel results and nurturing talent in their own labs.
- European and global foresight studies have indicated that the next era is driven by the need to achieve:
 - **Quantum advantage** using solid-state platforms
 - **Low-power, energy-efficient, high performance** computing based on disruptive devices
 - **Increased functionality** through advanced integration of a diverse range of materials and innovative technologies.

ASCENT+ will **enable and stimulate its user community** to bridge the gap between scientific exploration and development of proof-of-concept technologies to accelerate innovation pathfinding.

CONTACT US

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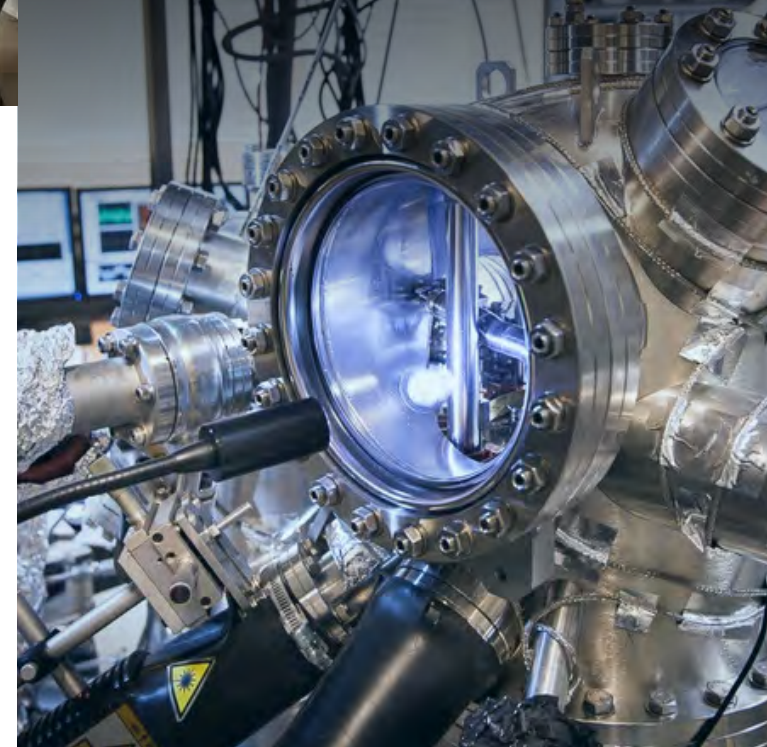


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Access the world's most advanced nanoelectronics infrastructures in Europe

ASCENT+ is a European Nanoelectronics Research Infrastructure programme **offering access to key enabling capabilities** in state-of-the-art processing, modelling & simulation data sets, metrology & characterisation, devices & test structures.



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What do we offer?

Fast and easy access to the world's most advanced nanoelectronics technologies and infrastructures for More Moore, More-than Moore and beyond CMOS.

EU funded access to **five partner sites** across Europe and **state-of-the-art** technology and expertise. The partner sites are Tyndall National Institute, CEA-leti, Imec, INL and Fraunhofer.

KNOWLEDGE HUB



Start-ups,
Academics,
SMEs &
Industry

ACCESS PROVIDERS



COMMUNITY NETWORK



Who can benefit from ASCENT+?

ASCENT+ is open to **all researchers** in universities, research centers, SMEs and large enterprises.

ASCENT+ regularly provides workshops, training and collaboration opportunities. **Early career researchers (PhD and Post-Doc)** are strongly encouraged to apply!

Tyndall National Institute

- Flexifab Clean Room
- Quantum Nanostructures & Devices
- Electrical & Physical Characterisation Suite

cea leti

CEA-leti

- Nanocharacterization Platform
- Resistive RAM
- FDSOI & Stacked Nanowires on SOI

imec

- GaN-IC Power Electronics
- CMOS FinFET technology
- 3D and advanced packaging

INL INTERNATIONAL IBERIAN NANOTECHNOLOGY LABORATORY

International Iberian Nanotechnology Laboratory

- Spintronics
- Graphene Platform
- NEMS/MEMS & Hybrid devices

Fraunhofer MIKROELEKTRONIK

Fraunhofer

- Advanced package integration
- Diamond Quantum Technologies
- Material stacks for emerging memories & in-memory computing

