



## Reaching out TO THE world

Each year, Maison MINATEC holds or organizes more than **600 events** (meetings, conferences, seminars, etc.). MINATEC welcomes **40,000 visitors** and hosts an average of one international delegation each week, giving tours of the 400 sq. m showroom and other facilities. MINATEC researchers work with other International micro and nanotechnology innovation clusters in Europe, the United States, and Asia.

## FROM MINATEC TO GIANT, THE global innovation CAMPUS

The GIANT campus (Grenoble Innovation for Advanced New Technologies) is an alliance of eight international institutions from higher education (Grenoble Ecole de Management, Grenoble Institute of Technology, and Grenoble Alpes Université), research (the CEA and CNRS), and the large European instruments (EMBL, ESRF, and ILL). GIANT is home to **10,000 research scientists, 10,000 students, and 10,000 industrial jobs** in the campus' flagship research areas.

GIANT is also at the center of a major urban redevelopment project, Grenoble Presqu'île, where new residential housing, shops, and services will provide a quality living environment for **10,000 residents**.

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## MINATEC

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 Création graphique Florence Pilet



MICRO and NANOTECHNOLOGY  
 innovation campus  
 GRENOBLE | ALPS | FRANCE



MINATEC, THE DEEP TECH  
 INNOVATION CAMPUS IN THE HEART  
 OF THE GRENOBLE-ALPS HIGH-TECH ECOSYSTEM

# ABOUT MINATEC



MINATEC is home to resources and know-how that are **unique in Europe**. The campus is active across the entire **innovation value chain**, from conducting **basic research** and **training tomorrow's engineers** to **high-tech R&D** and **tech transfer**. MINATEC has built an **international reputation** as a center for innovation.

The MINATEC Innovation Campus project began in 1999. When the campus opened in 2006 it helped to anchor what has since become the international standard for innovation ecosystems: **a triple helix combining education, research, and industry** and a single physical location where people from all three can work together.

The MINATEC Innovation Campus, established in part thanks to strong local political support, has grown into a high-caliber scientific and business community within one of France's major hubs for scientific research and engineering: the city of Grenoble is home to more than 67,000 students and 25,000 researchers; it is first in France for the number of research jobs and second for the number of engineering jobs.

**20** HECTARES  
**180,000** SQ. M. OF FACILITIES

**10** TECHNOLOGY PLATFORMS



**1,200** STUDENTS

**700** SQ. M. OF CLEAN ROOMS DEVOTED TO TEACHING

**4** INTERNATIONAL ENGINEERING DEGREE PROGRAMS

**200+** INDUSTRIAL PARTNERS

**25** COMPANIES HOUSED AT MINATEC Entreprises

## EDUCATION

Academics at MINATEC, through Grenoble Institute of Technology's Phelma School of Physics, Electronics, and Materials Science and Engineering, **benefit from some unique resources**. For example, engineering students on campus have access to the CIME Nanotech inter-university center for microelectronics and nanotechnology and its 700 sq. m of clean rooms devoted entirely to teaching. Phelma grants recognized international engineering degrees. The student body, which includes a significant number of international students, can take classes in English **at top universities across Europe**. And, with **scientific research and industrial R&D activities** right on campus, MINATEC helps Phelma attract top students from France and around the world.

## INDUSTRY

MINATEC researchers work with **more than 200 industrial partners**. MINATEC Entreprises offers a broad range of services, including office and lab space and clean rooms, for businesses that set up shop at the High-tech Building (BHT). Businesses of all sizes—from startups to major corporations—benefit from working **shoulder to shoulder with researchers** at MINATEC.

MINATEC also offers all of the advantages of being at the center of Grenoble's **high-tech and industrial ecosystems**. Global market leaders like STMicroelectronics and Soitec have chosen Grenoble for their manufacturing facilities. Grenoble also offers a **dynamic environment** for the ten or so startups spun off from MINATEC labs each year. Grenoble provides ample opportunities for stakeholders from all horizons to interact.

Finally, MINATEC coordinates a team of **150 technology-transfer experts**.

**20,700** SQ.M OF LAB SPACE  
**3,000** RESEARCHERS  
**350** PATENTS/YEAR

**400+** PhDs  
**1,600** SCIENTIFIC PUBLICATIONS/YEAR

## RESEARCH

One of MINATEC's missions is to maintain **close ties between basic scientific research and the industrial R&D** conducted at Leti. MINATEC hosts a diverse range of basic research labs including INAC (the Institute for Nanoscience and Cryogenics), which is affiliated with the CEA, as well as the joint research units affiliated with the CNRS (France's national center for scientific research) and Grenoble Alpes Université operating under the aegis of the FMNT (Federation for Micro and Nanotechnology). The presence of such a broad range of researchers on campus positions MINATEC to coordinate cooperation that goes **beyond the typical organizational boundaries**, generate synergies, maintain a high scientific profile (with around 1,600 publications per year, mainly by basic research teams), and demonstrate an outstanding capacity for innovation (with 350 patents filed each year) driven by Leti's strong intellectual property strategy.

The purpose of MINATEC's technology platforms is **to pool state-of-the-art equipment** to improve return on investment (the platforms are open 24-7), facilitate cooperation between researchers and other professionals on campus, and promote MINATEC's resources in order to attract **new partners from both industry and academia**.

The technology platforms are part of what makes MINATEC so unique. Industrial partners come to MINATEC to benefit from unparalleled resources in **microelectronics and microsystems** (the Nanotec 300 and MEMS 200 platforms), while academic research partners can take advantage of the Upstream Technological Platform (MINATEC Labs). MINATEC is also home to resources like the Nanocharacterization Platform that are useful to both scientific researchers and industrial R&D professionals.



**RESEARCH TOPICS AT MINATEC**

Advanced materials • **OPTICS AND PHOTONICS** • **MINIATURIZATION** • **INNOVATIVE IMAGING TECHNOLOGIES** • Complex systems • Energy efficiency • **SPINTRONICS** • Medicine of the future • **Micro and nanoelectronic components** • **NANOCHARACTERIZATION**



**Internet of Things • DATA-INTENSIVE COMPUTING • Connected health and wellness • TRANSPORTATION • Security • TELECOMMUNICATIONS**