

Austria –

Where Quantum Technologies Move Mountains

Austria has quickly emerged as a leading hub for quantum technologies research and development, propelled by initiatives such as the “Quantum Austria” program, which uses €107 million from the EU Recovery and Resilience Facility to strengthen its quantum ecosystem. Prominent institutions such as the University of Innsbruck, the Austrian Academy of Sciences, and the Institute of Science and Technology Austria (ISTA) are at the forefront of advancing quantum science. Their research primarily focuses on quantum information, gravity, and many-body systems. Austria is also home to industry leaders, including Infineon, ams Osram, Alpine Quantum Technologies (AQT), and ParityQC, which are pioneering innovations in quantum computing hardware, software and architecture. Additionally, Austria boasts cutting-edge supercomputing capabilities. MUSICA, its next supercomputer, will rank among the most powerful in the world, underscoring the country’s robust computational infrastructure.

3.26%	R&D/GDP ratio
No. 3	in the EU for R&D/GDP ratio
14%	research premium
No. 2	in the EU for STEM graduates
14.2%	above the EU average for labour productivity

Source: Statistics Austria, 04/2024; GII, 2023; UNESCO 2021; EU Commission, 08/2024



248 km

Austria’s long-distance world record in quantum communication



4

Nobel prize winners



€ 107 million

in funding for basic quantum research



21

R&D projects since 2021



Quantum volume of 128

A new European record for quantum computing set by Austrian startup AQT

Source: www.oeaw.ac.at, 2022; de.wikipedia.org, 2024; www.bundeskanzleramt.gv.at, 2024; www.uibk.ac.at, 2023

The Ecosystem

In Good Company – The Optimal Environment for Your Success

This dynamic quantum landscape, supported by research clusters and industry, positions Austria as a key player in Europe's quantum technology race, enabling it to attract global talent and reinforce its status as both a research and business hub.

Clusters and Networks

- > EuroCC
- > Photonics Austria
- > quantA
- > Quantum Connect
- > Quantum Society
- > VSC
- > Vienna Center for Quantum Science and Technology

International Companies



As one of Austria's biggest companies in the field of light and sensor solutions, amun OSRAM has launched the first LED with quantum dot technology on the market. Research is being carried out, for example, into how the quantum physics of the nanodimensions can be used for technical innovations: How can more and more intense light be obtained from an LED with less energy?



Infineon is a leading semiconductor manufacturer & researcher in quantum computing and has gained expertise in the industrialisation of quantum technologies. In 2022, the go-ahead was given for a quantum test laboratory at the Infineon research lab in Villach. Infineon is currently building a mobile quantum computer in collaboration with the English developer Oxford Ionics.



Spectra-Physics and New Focus are leaders in tuneable lasers ideal for applications in the Atomic, Molecular, and Optical (AMO) physics field, including precision spectroscopy, atomic cooling, optical clocks, microcavity resonators, and other quantum applications.

Startups and Scaleups



AQT realized the first general-purpose ion-trap quantum computer and is pioneering quantum information processing.



Novarion is developing quantum computing technologies and enables its customers to use Hybrid Quantum Computing.



Nutshell Quantum-Safe supplies Quantum Key Distribution solutions to secure Europe's critical infrastructure.



ParityQC is the world's only quantum architecture company, developing an operating system for quantum computers.



QWare is striving to build a hybrid quantum cloud platform that bridges the gap into the quantum age.

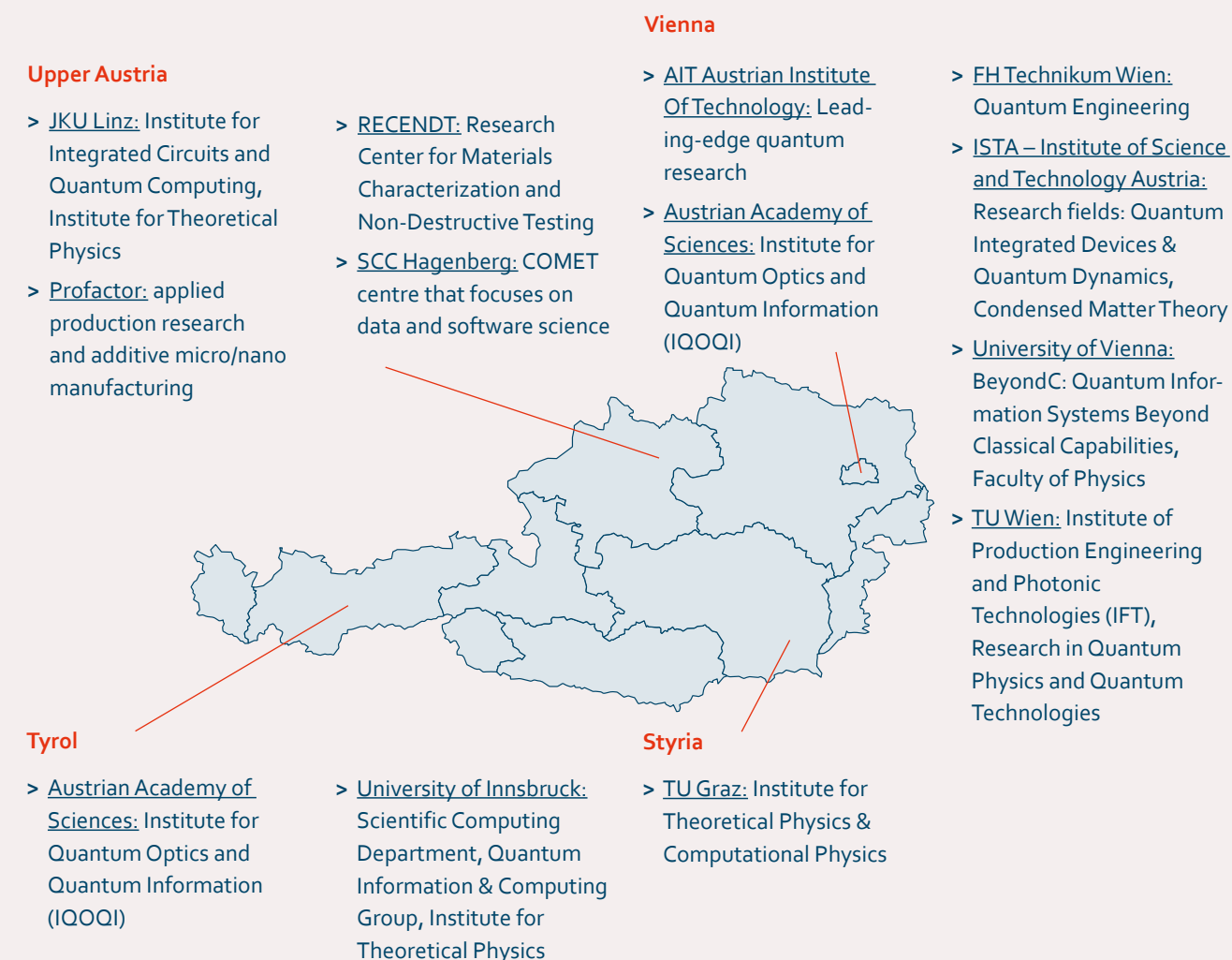


QTLabs exploits the commercial use of published basic cutting-edge scientific results in quantum optics and quantum communications.

Research and Education

Austria delivers first-class results in quantum technologies

The country's research landscape is shaped by partnerships among leading institutions. These institutions form part of a dynamic network that not only fosters high-level research but also addresses complex scientific challenges through interdisciplinary collaboration.



planqc, founded in 2022 and based in Germany, is a pioneer in the development of quantum computers and uses a unique technology based on neutral atoms as qubits. Launched as a spinoff of the Max Planck Institute of Quantum Optics within the Munich Quantum Valley, planqc builds on decades of Nobel Prize-winning research. planqc has set itself the goal of developing fault-tolerant quantum computers that can solve previously unsolvable problems and revolutionise industries such as climate and materials research, automotive engineering, aviation, logistics and pharmaceuticals.



"The Austrian research landscape in the field of quantum technology has been a world leader for many years. It was therefore a logical step for planqc to expand our business to Austria and open an office in Innsbruck."

Dr. Alexander Glätzle, CEO and Co-Founder of planqc

How we can support you – at no cost to yourself!

FIRST CONTACT

- > General information
- > Benchmarking with other countries
- > Sector-specific data
- > Legal & financial information



Typical questions

Why should I choose Austria?
What R&D centers can I find in my sector?
What do I need to set up a company here
- and how long does it take?

EVALUATION

- > Finding the right location
- > Cost details
- > Identifying suitable networks
- > Contacting service providers



What's the optimal location for me in Austria?
What is a "collective agreement"?
How much will I spend on labour costs?
What is meant by a "Gewerbeberechtigung"?

REALISATION

- > Organisation of fact-finding missions
- > Identifying the right grants/funding programmes
- > Finding specific properties/locations
- > Explaining cultural differences



Who can organize all the necessary appointments for me?
How do I find employees here?
Which funding programme is relevant for my project?

EXPANSION

- > "Troubleshooter"
- > Establishing useful contacts
- > Support of local management in winning expansion project



Our HQ is evaluating different locations – how can I pitch Austria?

Help! I need somebody ...
investinaustria.at

