



# Austria\*

\* Research and Development -  
Essence of Your Corporate Success

# All of Europe in only 3 Hours Flight Time



Austria's central geographic location in Europe makes it a business interface between East and West.

# Dynamic Research Location

Research Location Austria stands out in international comparison. Companies profit from a favorable business environment, qualified specialized staff and a modern infrastructure.



Austria is a success model, ranking among the most prosperous and innovative countries in the European Union. The dynamic research location of Austria is on the fast track. Since 1995 Austria has almost doubled its research rate, which is now the fifth highest in the EU. Customized innovation funding programs, highly qualified specialized staff and more than 50 industry clusters ensure optimal networking between business and science.

In spite of this good starting position, we are continually working on creating an even more favorable business environment for the benefit of companies. Austria once again optimized the conditions for companies and research on the basis of new knowledge transfer centers, the funding and promotion of prototype development and patent applications, pilot plants at universities and active support provided in the changeover to Industry 4.0. In this spirit we would like to warmly welcome you to Austria.

## **Reinhold Mitterlehner**

Vice Chancellor of the Republic of Austria  
and Federal Minister of Science, Research and Economy

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## Austria – Land of Research and Development

- 22 public universities
- 12 private universities
- 21 universities of applied sciences
- More than 30 specific research promotion programs
- More than 3,300 research projects in companies
- 208,000 continuing education and training offerings
- More than 3,600 non-university research facilities
- 60+ industry clusters and numerous international R&D headquarters

# Good Reasons for Research Location Austria

Research-oriented companies as well as international investors and top scientists consciously decide in favor of the strong location.



**Innovative diversity.** The Austrian model of success creates optimal conditions for international companies such as Baxter, BMW, Bosch, Infineon and Novartis which bundle their R&D activities and competence centers in Austria. Top-level research, innovative spin-offs, clusters and big players on the global marketplace ensure that inspiring ideas are turned into marketable products and services. Accordingly, high-tech technologies “Made in Austria” are the basis for practical applications or intelligent data security systems. Cancer research, smart grids or intelligent electricity networks of the future complement traditionally strong areas such as mechanical engineering, vehicle manufacturing, environmental technologies, innovative materials and the metals industry, which serve as export-oriented technology providers.

**All advantages at a glance.** One thing is certain in this regard: excellent research achievements are only possible under favorable conditions, which scientists and innovative companies have at their disposal throughout Austria:

- Customized funding and financing of application-related and basic research
- Ten percent research premium as well as attractive tax advantages
- A dense network of competence centers and industry clusters linking the scientific and business communities
- An international research elite as well as soundly-trained specialists in core areas of competence such as life sciences, environment and energy, information and communications technology (ICT) along with mobility and traffic
- The pre-eminent East-West business interface in a central geographical location in Europe
- Excellent living and working conditions against the backdrop of a cosmopolitan and international environment



# A Quantum Leap Ahead

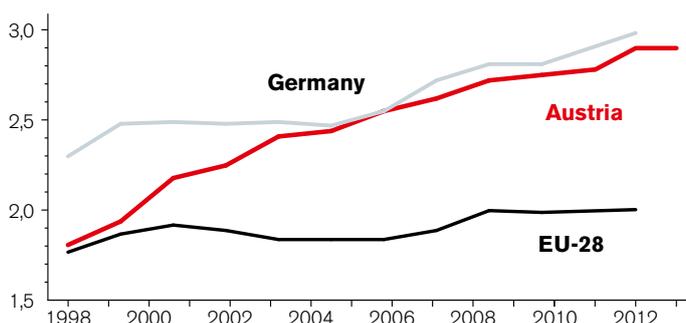
Austria is among the top five with respect to its research ratio, and an innovation follower boasting top-notch “intellectual capital”.

**Full speed ahead.** Austria features the fifth highest research ratio in the EU. The country has come close to doubling its R&D rate since 1995, from 1.5 percent to 2.88 percent of GDP or a total of EUR 9.32 billion (global estimate for 2014). In international comparison, investments in research and development rose by 27 percent in the period 2007 to 2012 (EU average: 17 percent). Domestic and foreign companies accounted for the lion’s share or 61 percent of total R&D expenditures in Austria.

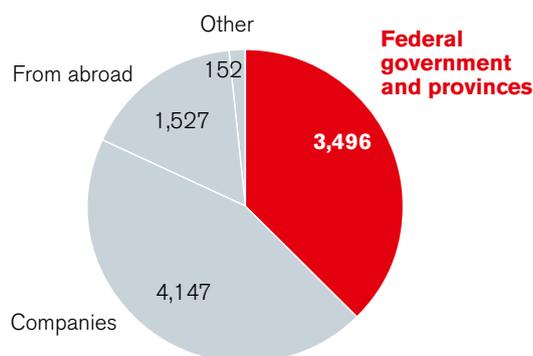
According to the Innovation Union Scoreboard 2014, Austria ranks sixth with respect to patent applications among the 28 EU member states in its role as an innovation follower, and achieves a top position in the category “intellectual capital” next to Denmark, Germany and Sweden.

**Programs to benefit the economy.** In international competition, companies require good cooperation partners and support. Austria once again optimized the conditions under which they operate, as demonstrated by new knowledge transfer centers, the funding and promotion of prototype development and patent applications and pilot plants at universities. Moreover, highly-industrialized Austria proactively supports the smart factory, machine learning and the Internet of Things, in short Industry 4.0.

**Development of R&D spending in Austria, Germany and the EU-28**  
% of GDP



**Austrian investments in R&D**  
EUR million, estimates for 2014  
Total R&D spending: EUR 9,322 million



Sources: Eurostat, Austrian Statistical Office, \* from 2012 preliminary figure

Source: Austrian Statistical Office, 2014

# Research outlook 2020

Hannes Androsch, Chairman of the Council for Research and Technology Development, talks about the future of R&D in Austria:



Hannes Androsch,  
Chairman of the Austrian  
Council for Research and  
Technology Development

## **What strengths does Austria offer as an internationally sought-after research location?**

*"With a research rate of 2.88 percent in the year 2014 and a strong cooperation between science and business, Austria has carved out a good niche for itself as an innovation location. It is understandable that the outbreak of the international financial and economic crisis slowed down this positive development. However, this situation must be rectified. It is important to build momentum again".*

## **Where do you envision Research Location Austria to be ten years from now?**

*"The European sovereign debt crisis is a challenge but an opportunity as well, namely to implement long overdue reforms, also in Austria. If we succeed in freeing ourselves from some of the old baggage and investing these funds in the future-oriented fields of education, research and innovation, then I see Austria as a highly innovative location ten years down the road, offering the best conditions for excellent science and research. That is also one of the objectives of the Austrian Government's FTI Strategy".*

## **In which fields is the Republic of Austria with its red-white-red flag already delivering top performance?**

*"Austria is very well positioned in many areas. Think of the excellent basic research in the fields of mathematics and quantum physics, or the outstanding developments of companies such as Siemens, voestalpine, Infineon and AVL List, to name a few. The future can be shaped by building upon these many existing strengths".*

**Hannes Androsch** was Austrian Minister of Finance from 1970 to 1981 for the Social Democratic Party, and currently serves as the Managing Partner of AIC-Androsch International Consulting and co-owner of Salinen Beteiligungs GmbH and AT&S.

**The Council for Research and Technology Development**, founded in the year 2000, is an advisory body to the Austrian Government. Hannes Androsch was elected to serve as Chairman of the Council for Research and Technology Development in 2010.

→ [www.ratfte.at](http://www.ratfte.at)



# Highly Skilled Personnel? No Problem at All

Austria offers an application-oriented education and opens up new opportunities for qualified employees from other countries thanks to the Red-White-Red card.

**Top-notch employees.** Not only are good ideas needed to bring innovations to market, but also highly qualified specialized staff for the practice-oriented implementation. Austria offers both. Application-oriented education and training have a long tradition here, whether at the numerous higher technical colleges, 34 universities or 21 universities of applied sciences with more than 556 courses of study.

**Priority given to education.** Austria is in the front ranks of the OECD with educational expenditures substantially higher than the OECD average. Moreover, close to 90 percent of all Austrians conclude vocationally-oriented training. There is hardly any other country in the world which matches Austria in the importance attached to the professional development and further education of employees. This is underlined by its 5th place ranking in the World Competitiveness Yearbook 2014. The return on these investments is the utmost motivation and productivity of the staff. Austria is also among the very best in the EU-27 with respect to labor productivity per person employed in manufacturing industry according to the EU Commission in 2014.

**A new home.** Well-trained specialized employees as well as researchers are internationally mobile in a global society. With the Red-White-Red card, key employees such as technicians or top researchers from non-EU member states and third countries who have studied in Austria can be more easily employed.

**Labor productivity 2013 in EU comparison**  
GDP per person employed in PPS, EU-27=100

Luxembourg	163.9
Ireland	135.5
Belgium	127.3
France	116.0
<b>Austria</b>	<b>113.3</b>
Denmark	111.0
Italy	108.8
Netherlands	108.8
Euro area	108.6
Germany	107.0
EU-27	100.0
United Kingdom	99.4
Poland	74.3
Czech Republic	71.9

**Commitment to the company**  
10 = Motivation of employees is high

Switzerland	1	7.94
Denmark	2	7.87
Malaysia	3	7.68
<b>Austria</b>	<b>5</b>	<b>7.59</b>
Japan	6	7.56
Germany	9	7.49
Netherlands	17	6.62
USA	18	6.56
United Kingdom	25	6.30
Czech Republic	39	5.42
Italy	45	4.92
France	46	4.77
Poland	51	4.35
Hungary	52	4.34

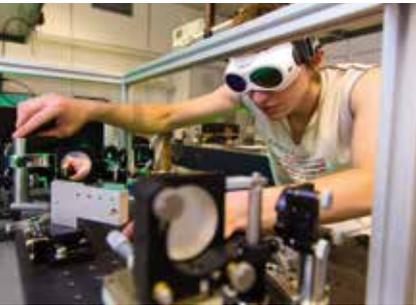
Source: EU Commission, Eurostat, September 2014

Source: World Competitiveness Yearbook 2014



#### Hub for international cooperation and mobility

Austria's universities are strongly driving the process of internationalization forward: this is impressively demonstrated by Austria's above-average level of participation in EU research programs, for example its 5th place ranking in the success rate of the prestigious ERC grants. Austrian scientists are among the world's best in a wide range of areas, for example in quantum physics, mathematics, medical sciences as well as in the humanities and social sciences.



## 10 Percent Research Premium and Attractive Tax Advantages

Whoever carries out research in Austria pays lower taxes. Domestic and foreign companies profit from the high research premium as well as tax advantages.

**Research and research even more.** R&D at a high international level poses major financial challenges to companies and research institutions. For this reason, Austria has reduced the risk of investments. The conditions underlying corporate innovations have improved further thanks to the ten percent research premium for in-house R&D as well as contract research expenditures.

**Tax advantages.** Moreover, the Austrian tax system is extremely attractive for companies, featuring the education allowance, training premium, tax loss carryforwards and the possibility to transfer hidden reserves. The corporate tax rate is set at 25 percent whereas the net worth tax and trade tax are not levied in Austria.



“The Austrian research premium is an extremely attractive subsidy instrument in international comparison. Such a generous promotion of investments and the expansion of the program to encompass contract research in the EU and EEA region are not available in other countries in this form. The research premium is tax-free and is distributed regardless of the company’s business results. In this way companies also benefit from a cash advantage during a loss-making phase”.

**Natascha Stornig, LeitnerLeitner Tax Audit Advisory**

# Research Funding – Who Pays for it?

There are suitable incentives for good R&D ideas, whether application-oriented or basic research. It pays to inquire.



## **Austrian Research Promotion Agency (FFG)**

The Austrian Research Promotion Agency (FFG) serves as the central funding institution for application-oriented research in Austria. More than 30 research promotion programs enable quick access to research funding services for companies based in Austria which operate in all business sectors, including subsidiaries of foreign industrial groups. The portfolio begins with basic funding, which supports the commercial exploitation of research projects carried out by companies, research institutions as well as individual researchers and inventors. Start-up funding targets technology-oriented company founders and SMEs. Any company aiming at establishing or expanding its research headquarters in Austria will find the right funding via the Headquarter Strategy program.

## **Austrian Wirtschaftsservice GmbH (aws)**

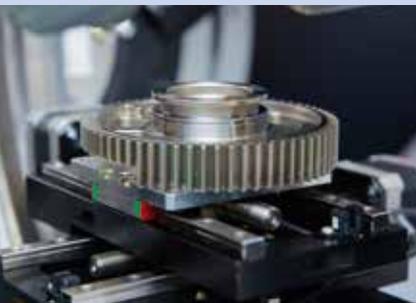
R&D-oriented companies are highly valued in Austria. This is because they serve as a strong stimulus to dynamic innovative development thanks to new products, state-of-the-art production processes and services. However, it is a long road from the idea for a leading-edge technology to its market launch because enormous financing gaps must be bridged. For this reason, aws in its role as the funding bank of the federal government offers targeted consulting, support and funding of R&D projects in the future-oriented sectors of biotechnology and nanotechnology, environmental and energy technology along with information and communications technology to start-ups, SMEs and large established companies. The development of prototypes, pilot, demonstration and testing facilities is enabled by financial grants, low interest loans, the assuming of liabilities or providing guarantees.

## **Austrian Science Fund (FWF)**

The Austrian Science Fund FWF (Fund for the Promotion of Scientific Research) is Austria's central body for the promotion of basic research. FWF and FFG offer special compatible funding programs for application-related basic research with a realistic potential for commercial exploitation and corporate interest. Projects and research groups promoted by the FWF attract top researchers and thus strengthen the brain capital in Austria.

### Funding programs:

- [www.ffg.at](http://www.ffg.at)
- [www.awsg.at](http://www.awsg.at)
- [www.fwf.ac.at](http://www.fwf.ac.at)
- [www.bmwf.gv.at](http://www.bmwf.gv.at)
- [www.bmvit.gv.at](http://www.bmvit.gv.at)
- [www.foerderkompass.at](http://www.foerderkompass.at)



# Renowned Research Institutes

Austrian researchers have a good reputation across the globe. This comes as no surprise, considering that their innovations are changing the world of tomorrow.

The “cooperative sector” i.e. non-university research is the fastest growing field in Austria’s research landscape, with R&D expenditures almost tripling over the past ten years. More than 7,000 people are employed at 57 non-university research facilities.

**Austrian Cooperative Research (ACR).** SMEs are important drivers of the innovation merry-go-round, whether this involves sustainable construction, environmental technology, renewable energy, the quality and safety of food or materials and process innovations. For this reason, the dynamic impetus provided by good ideas is being selectively supported by Austrian Cooperative Research in the form of 500 research projects each year.

**Austrian Institute of Technology (AIT).** The Austrian Institute of Technology (AIT) plays a key role in Austria and in Europe as a research and technology institute for key infrastructure issues of the future. With its five departments of Energy, Mobility, Health & Environment, Safety & Security as well as Foresight & Policy at locations such as TechGate Vienna or the Austrian Research Centers Seibersdorf, AIT closely cooperates with the business community on developing new infrastructure solutions. Multinational companies such as Siemens, Magna, OMV and AVL have long had confidence in the competencies of AIT.

## Research facilities benefiting the economy

Austria’s R&D landscape

	Research units	Employees
Academies of applied sciences	1,304	42,291
Non-university public research institutes	252	6,185
Cooperative sector	57	6,848
Corporate sector	3,327	51,795

Source: Statistics Austria, 2013

**Joanneum Research.** For more than 30 years Joanneum Research has been carrying out leading-edge research of international caliber and is a sought-after R&D partner for top companies. With its five research units in Materials, Health, Digital, Resources and Policies, Joanneum Research ranks as one of the largest non-university research institutions in Austria today and an important driver of application-oriented research and technological development in the fields of e-health, nanomaterials, Web 2.0, renewable energies along with economic and innovation research.



**Christian Doppler Research Association.** More than 70 Christian Doppler laboratories at Austrian universities create an extremely productive bridgehead between science and business and give the business community effective access to application-oriented basic research. The temporary facilities operating for a period of seven years boast annual budgets of up to EUR 600,000, 50% of which is financed by public sector funding. This serves to reduce the corporate risk. Other advantages are that CD laboratories compile basic knowledge in an ongoing exchange of experience, which in turn is applied in companies to develop new products and processes. The close connection to the scientific community means that the business community remains closely attuned to scientific trends and exploits the opportunity to further develop the latest findings into technology push innovations. It is not without good reason that some 125 international industrial partners such as AVL, Infineon, OMV, Sandoz, voestalpine, Biomay, Lenzing and Plansee already relied on this form of private public partnership in 2013.

**The Ludwig Boltzmann Gesellschaft (LBG)** specializes in cooperative research, and initiates the highest quality research issues together with academic and corporate partners. As a private supporting organization, it establishes Ludwig Boltzmann institutes for limited periods of time. The priorities are human medicine, life sciences, humanities, social sciences and cultural studies with an emphasis on health sciences. In particular, the focus has been on interdisciplinary and transnational research. At present some 300 employees at 20 institutes and 5 clusters deal with the latest scientific issues and carry out top-level international research work. The LBG is rated as one of the strongest players in Austria for medical-clinical research, cooperating with business partners such as Siemens and Bayer Healthcare Pharmaceuticals as well as start-ups and SMEs, for example Tissue Gnostics and RISC Software GmbH.

**Other facilities.** Other recognized research partners for industrial companies include arsenal research in Vienna, Salzburg Research in Salzburg, Fraunhofer Research GmbH, Upper Austrian Research, V-Research and Carinthian Tech Research in Carinthia.

→ [www.acr.at](http://www.acr.at)  
 → [www.ait.ac.at](http://www.ait.ac.at)  
 → [www.cdg.ac.at](http://www.cdg.ac.at)  
 → [www.lbg.ac.at](http://www.lbg.ac.at)  
 → [www.joanneum.at](http://www.joanneum.at)  
 → [www.ist.ac.at](http://www.ist.ac.at)



## Well Networked Through Excellent Competence Centers

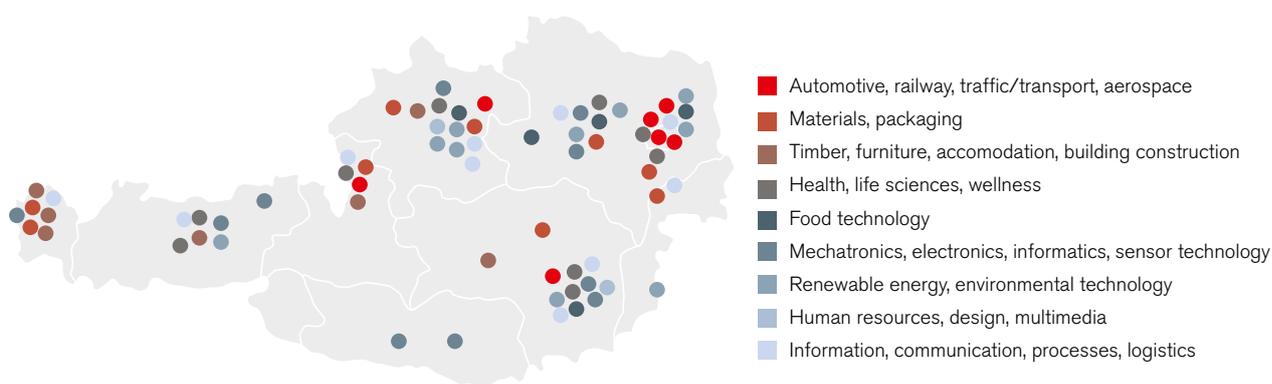
Considerable importance is attached to strategic partnerships between companies and research facilities.

**Close to 50 competence centers.** “A knot cannot be tied with one hand only” is an old Mongolian jewel of wisdom. For this reason, companies as well as research facilities in Austria have been involved in strategic partnerships for years in the form of competence centers and industry clusters.

**Excellent cutting edge technologies.** The 47 competence centers encompassed in the Austrian funding initiative COMET (Competence Centers for Excellent Technologies) promote the cooperation between industry and science in a targeted manner with respect to leading edge technologies. Accordingly, Big Pharma companies rely on the know-how of the Graz-based “Research Center Pharmaceutical Engineering” (RCPE) for pharmaceutical process and product development. At Oncotyrol, the renowned competence center for cancer therapy in Innsbruck, new research findings in the field of genomics, proteomics and metabolomics will be transferred to clinical cancer medicine. The “Austrian Center for Medical Innovation and Technology” (Acmit), a competence center in Wiener Neustadt specializing in the development of medical robotics, is opening up new perspectives for buttonhole surgery (minimally invasive surgery), whereas “Bioenergy 2020+” boasts several research facilities in Austria and successful innovations in environmentally-friendly energy generation from biomass.

### Clusters and networks

in the Austrian provinces and supraregional initiatives



# More Than 60 Industry Clusters

Synergies are exploited in dense networks, ranging from international R&D headquarters to SMEs and innovative spin-offs.



More than 60 industry clusters located in all nine federal provinces, consisting of 7,000 companies and 825,000 employees, enhance Austria's innovative strength. The cluster participants are characterized by internationality and a high research ratio averaging 7.5 percent.

Sectors and specialties	Clusters	Business/scientific partners
Environmental technology, renewable energy	10	1,000
Life sciences	8	500
Automotive	7	600
ICT	7	550

**Eco World Styria.** Eco World Styria leads the ranking of worldwide environmental technology clusters ("2012 Global Cleantech Directory"). Global players such as Andritz Hydro benefit from the "Cluster Management Excellence Label" in gold. R&D focus: biomass, solar and recycling technologies

**LISAvienna – Life Science Austria Vienna.** Vienna is an internationally sought-after R&D location, with close to 600 life science companies operating in the field of life sciences such as Boehringer Ingelheim and Baxter. R&D focus: medical biotechnology in the fields of vaccinations, anti-infectives, immunology and oncology as well as medical engineering

**ACstyria and the Automotive Cluster Upper Austria.** The strength of the automotive clusters is underlined by their approximately 380 members. Multi-national companies such as Magna and AVL profit from the VIRTUAL VEHICLE competence center. R&D focus: automotive, aerospace and rail systems

**Mechatronics Cluster.** Mechatronics is the research field of the future. 340 partners such as Artaker CAD Systems, Robert Bosch Diesel Development, Siemens and Carl Zeiss take advantage of this collaboration to drive innovation forward. R&D focus: mechanical, plant and apparatus engineering.

**Photonics.** The Austrian cluster landscape is developing dynamically, and quickly exploits key new technologies such as photonics, carrying out research within international networks. R&D focus: optoelectronics and integrated optoelectronics.

→ [www.clusterplattform.at](http://www.clusterplattform.at)  
 → [www.eco.at](http://www.eco.at)  
 → [www.LISAvienna.at](http://www.LISAvienna.at)  
 → [www.mechatronik-cluster.at](http://www.mechatronik-cluster.at)  
 → [www.acstyria.com](http://www.acstyria.com)  
 → [www.automobil-cluster.at](http://www.automobil-cluster.at)  
 → [www.photonics-austria.at](http://www.photonics-austria.at)



Klaus Huttelmaier,  
Sole Managing Director  
of Robert Bosch AG,  
representative of the Bosch  
Group in Austria with  
responsibility for coordinating  
business operations in Central  
and Eastern Europe

## The Choice in Favor of Austria

The German Klaus Huttelmaier, a longstanding manager at Bosch, is convinced of the merits of Austria as a research location.

### What role do the Austrian competence centers of Bosch play within the global Bosch Group?

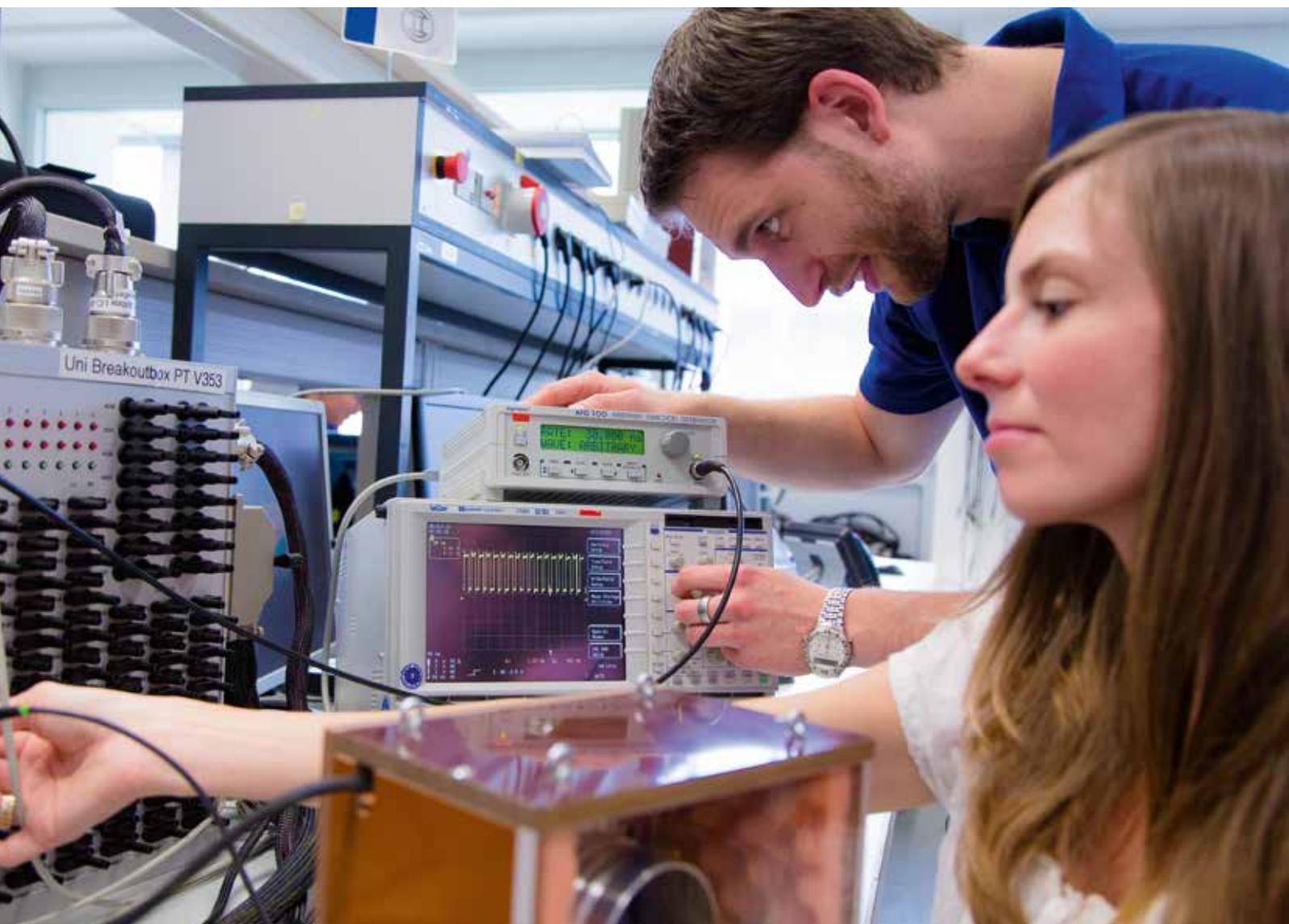
*“Robert Bosch AG operates important development and competence centers for automobile engineering in Vienna, Linz and Hallein based on a staff of about 700 engineers. They define the pace of innovation in their specialized field of work within the Bosch Group. The developmental areas range from common rail injections for commercial vehicles and large diesel engines to electronic control systems for passenger cars. As a consequence, research expenditures are correspondingly high at EUR 94.2 million in 2013, comprising a research rate of 17 percent. In recent years we also managed to attract additional development projects to Austria, such as the development of engine control units for motorcycles and the development of gasoline injection valves for large engines. We also want to expand our research network in the future and consolidate the leading role of Bosch Austria within the company.”*

**Business meets science.** Bosch cooperates with various universities and academies of applied sciences, for example with the Automation and Control Institute of the Vienna University of Technology led by Andreas Kugi. They have been working together for seven years to further develop complex ideas in the field of control engineering, also involving diploma and doctoral candidates. “Applications are developed in a manner enabling Bosch to immediately use them”, says Daniel Seiler-Thull, Senior Project Manager at Bosch.

**Young scientists on the road to success.** The core of the drive control system which Bosch is currently deploying for hydropneumatic hybrid vehicles was developed by the diploma candidate David Faustner at the Vienna University of Technology. In his diploma thesis he focused on the issue of how such a hybrid drive can be most effectively controlled and electronically regulated. Andreas Pfeffer also achieved another success in this area on the basis of his dissertation. He examined how to very precisely specify the amount of energy in hydropneumatic storage devices. A direct measurement would be too expensive, which is why an estimation strategy functioning without this measurement and requiring only a very short computing time was developed.

→ [www.bosch.at](http://www.bosch.at)

→ [www.acin.tuwien.ac.at](http://www.acin.tuwien.ac.at)



“For me it is important to look into the workings of industry in order to be able to pass on relevant know-how to students which can be applied in practice. The students not only have the possibly to develop new, scientifically exciting methods with us, but they can also practically implement them in cooperation with an industrial partner.”

**Andreas Kugi, Vienna University of Technology**



Alfred Stern,  
Executive Vice President  
Polyolefins of Borealis

## The Best Minds

Borealis, one of the leading international providers of basic chemicals and plastics, finds the most innovative minds in Austria.

### Does Borealis find excellently trained employees in Upper Austria?

*“The growing demand for highly developed plastics in our core target markets in the automobile, infrastructure and packaging sectors means that we continually require new generations of optimally trained researchers and experts. This pool of talents exists in Austria, and helps us to further expand our innovative edge. The geographical and thematic proximity of our Innovation Headquarters in Linz to research facilities in Austria, in particular Johannes Kepler University and the University of Applied Sciences Upper Austria, provides Borealis with the perfect environment to attract the best employees to the company and simultaneously to press ahead with university partnerships. Our research headquarters alone employs about 300 people from over 30 nationalities.”*

**Business meets science.** In the year 2006, Borealis decided to turn its Austrian site located in Linz into the center of its entire international research activities. It cooperates with numerous Austrian research facilities such as Johannes Kepler University, academies of applied sciences and competence centers. In 2009 Borealis opened Innovation Headquarters (IHQ) in Linz, serving as its research and development center.

**Natural fiber reinforced compounds.** If you only associate Borealis with the field of chemistry, you are barking up the wrong tree. Partnerships with numerous scientific institutes are on the company's agenda. For example, Borealis has been developing natural fiber reinforced polyolefin compounds since 2008 in cooperation with Wood K plus, the renowned competence center for wood. Compounds refer to the joining of polymers with other materials. There are numerous potential applications for these materials, for example in the automotive sector, but also in the fields of household goods and consumer electronics. Based on this collaboration, Borealis launched new natural fiber reinforced polymer materials on the marketplace in 2013, especially for the automobile industry. These new materials offer outstanding cost efficiency, weight reduction and the additional advantage of being more sustainable than conventional materials.

→ [www.borealisgroup.com](http://www.borealisgroup.com)

→ [www.kplus-wood.at](http://www.kplus-wood.at)



“The more effective the exchange process takes place between the business and scientific communities, the more successful research is. The R&D team of Wood K plus is highly motivated and very open to new partnerships, not least due to the extensive interest in new developments in different subject areas.”

**Andreas Haider, Wood K plus (Wood Competence Center)**



Sabine Herlitschka  
Vorstandsvorsitzende der  
Infineon Technologies  
Austria AG

# Ideal R&D Location for International Companies

Companies from all over the world, often subsidiaries of multinational companies, give an insight into their operations. How do they profit from Austria as a research location?

**Innovative and creative impetus.** *“Innovation is a major basis for the success of Infineon Austria as well as for Austria as a technology location and knowledge hub. Infineon was the most research-intensive company in the country in 2013, with R&D comprising 23 percent of total revenue. In the coming years we plan investments and research expenditures in Austria to the amount of EUR 290 million. A good example is our project “Pilot Space Industry 4.0”, a completely new concept in Austria of networked and knowledge-intensive production at the Infineon site in Villach.”*

**R&D focus.** Energy-saving power chips for industry, automobiles and consumer electronics. Contactless chips for card applications and security chips for payment and e-government solutions. Microelectronic mechanical systems for tire pressure sensors and silicon microphones for smart phones. Integrated switches for automobile radar systems.

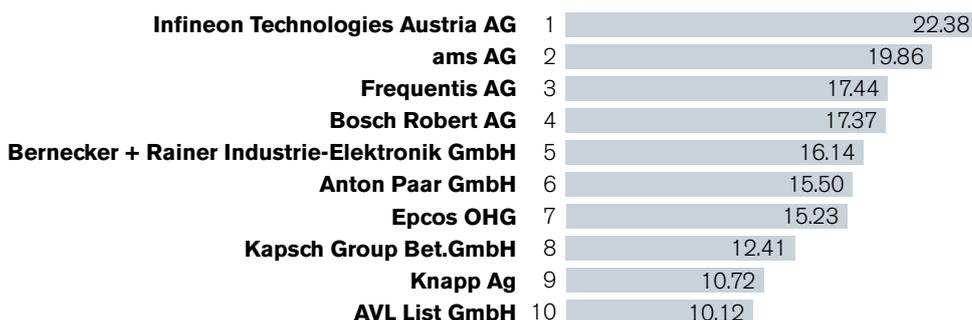
**Top-level research.** Strategic partnerships with the Austrian Institute of Technology (AIT) in the fields of smart grids, e-mobility, ambient assisted living, biosensors, innovation management and IT security

**Partnerships.** Vienna and Graz University of Technology, JKU Linz, University of Vienna, Alpen Adria University Klagenfurt, University of Innsbruck, AIT, Joanneum Research, Christian Doppler Research Association, Carinthian Tech Research

**R&D staff:** 1,108

### Research champions in Austria

Companies with the largest R&D share compared to net turnover in % 2013



Source: Goldener Trend 2014

# Magna Steyr

**Innovative, creative and cosmopolitan.** *“Magna Europe & Magna Steyr highly value the good research climate prevailing in Austria. An outstanding educational system, numerous competent partner companies in the region and the possibility to successfully cooperate with universities and universities of applied sciences make Austria an attractive research location for Magna.”*

**R&D focus.** New vehicle concepts, lightweight vehicle construction, alternative drive systems, energy storage systems (batteries, tank systems), vehicle electrical and electronic systems, virtual development and production technologies

**Top-level research.** The project CULT “Car’s Ultra Light Technologies” focuses on developing a modern, natural gas-driven lightweight vehicle in collaboration with the firm’s cooperation partners: Vienna University of Technology, Montan University Leoben, Polymer Competence Center Leoben (PCCL), Austrian Foundry Research Institute (ÖGI)

**Partnerships.** Universities of Vienna, Linz, Graz and Klagenfurt, Graz University of Technology, Vienna University of Technology, Montan University of Leoben, various academies of applied sciences, a wide range of non-university R&D institutes, including AIT, JR, ACR, Fraunhofer and several COMET competence centers

**R&D staff:** 950



Günther Apfalter, President  
Magna Europe & Magna Steyr

# Bionorica

**Unique expertise.** *“Innsbruck offers an excellent framework for R&D to Bionorica, Germany’s leading producer of herbal medicinal product. Austria’s expertise in researching medicinal plants is unique because there are several university chairs here for pharmacognosy, among other reasons. This expertise makes a decisive contribution to our success together with perfect scientific networking and intelligent funding measures.”*

**R&D focus.** Research into medicinal plants, especially analytics and the new and further development of extraction processes

**Top-level research.** Exclusive partnership with the Austrian Drug Screening Institute, Innsbruck

**Partnerships.** 30 Austrian institutes e.g. University of Innsbruck, Wien, Graz, Medical University of Innsbruck, Vienna University of Veterinary Medicine, University of Vienna, Cluster Life Sciences Tyrol, Oncotyrol - Center for Personalized Cancer Medicine

**R&D staff:** 22



Michael Popp, CEO  
Bionorica Research



Gerald Murauer  
 Head of the Siemens research  
 department Corporate  
 Technology CEE, Siemens

## Technology Leader from Austria

How “Corporate Technology CEE Siemens” successfully positions itself in seven of the Group’s global 50 research fields.

### What does Siemens particularly value about Austria as a R&D location?

*“Austria’s performance over the past few years in the fields of research, technology and innovation has been astonishing. It is now more important than ever to maintain this impetus and strengthen the business location. The first asset in the technology sector is always education. On average, Austria has a very high level of educational attainment, which benefits research as well as the economy in general. We have excellently trained technicians. Moreover, we profit from very good partnerships with universities and a commendable funding landscape. As long as these conditions remain stable, and there is no indication to the contrary, Siemens Austria will be able to hold up well in the future as a research location against competition within the Group.”*

**Science meets business.** Siemens cooperates with various universities and academies of applied sciences such as Johannes Kepler University Linz, Montan University of Leoben and the Vienna University of Technology in order to develop and implement innovations as effectively as possible.

**Construction Site Monitoring – 3D digitalization technology.** A large number of research projects have been carried out in cooperation with the Graz University of Technology, for example in the fields of mobility, smart grids and data analysis. One prominent example is CONSTRUCT, a project using 4D data (time-varying 3D data) as the basis for efficient data analysis. The current data of construction sites is recorded with the help of civilian drones. A three dimensional model of the scene is calculated from aerial photographs of the building. The technology enables construction progress as well as deviations from plans to be detected over the course of time. Potential applications include automatic construction site monitoring, inventory taking, infrastructure, urban and factory planning.

→ [www.siemens.at](http://www.siemens.at)

→ [www.tugraz.at](http://www.tugraz.at)



“As a technical university, the Graz University of Technology attaches considerable importance to transferring the results of basic research to practical applications. The cooperation with companies is stimulating and constructive for both sides. Specific applications serve as the basis for identifying new issues relating to future basic research. CONSTRUCT is a very good example of this.”

**Horst Bischof, Graz University of Technology**



Sabine Seidler,  
Rector of the Vienna University  
of Technology (TU Vienna)

## Exciting Research Landscape

Scientists need the right environment in order to pursue a career in research and development. Many consider Austria to be just the right place.

### In what ways does Austria stand out in international comparison as a research location?

*“Austria is a small country, but offers an exciting research landscape. In any case its geographical location in the heart of Europe is an advantage. Moreover, the networking of science and industry also functions well. This is demonstrated, among other things, by the funding made available by both the federal government and industry. Austria ranks among the most technology-intensive economies, with universities driving innovation. Austria boasts internationally recognized expertise. This particularly applies to fields such as energy and the environment, ICT, mobility and transportation. These are also focal points of the work done by the Vienna University of Technology. The Austrian mix of basic and application research enables the country to maintain its knowledge edge and contribute to solving global problems.”*

### You were born in Germany. How is it for you to work and live in Austria?

*“Naturally there are subjectively perceived differences. However, the place of birth is becoming less important in a united Europe, and in a period of advancing globalization. The course of my scientific career took me to Vienna. Of course the quality of life is high, and I enjoy the high density of knowledge and creativity. However, ultimately competence is at the forefront. The necessary key qualifications include a certain degree of flexibility in addition to professional and social competence. This is what we equip our graduates with. I have Austrian citizenship now and I also feel very much at home here.”*

### Austria attracts investors with the highest quality of life

Ranking	City	Country
1	<b>Vienna</b>	<b>Austria</b>
2	<b>Zurich</b>	<b>Switzerland</b>
3	<b>Auckland</b>	<b>New Zealand</b>
4	<b>Munich</b>	<b>Germany</b>
5	<b>Vancouver</b>	<b>Canada</b>

Source: Mercer, Quality of Living Survey 2014

**The first pilot plants are being set up at the Vienna University of Technology. What do you expect from them, and can companies also benefit?**

*“Industry 4.0 or the new Industrial Revolution is the current challenge for research and business. The focal points of our research are interdisciplinary and transdisciplinary. We will further expand our strategic cooperation with companies, and contribute our know-how and experience from the learning factory. At the pilot plant companies can implement and try out working prototypes or test new products and processes. At the same time students can benefit from industry-oriented training, and take this know-how with them to the companies. It is a question of jointly carrying out interdisciplinary research, developing company-specific solutions without disrupting production operations, and offering training and further education programs.”*

**Practically-oriented pilot plants**

**Industry 4.0.** Production processes can be tested at the first pilot plant in collaboration with the Vienna University of Technology (TU Vienna). As realistic models, pilot plants offer a real but neutral industrial research and development environment which enables development and testing work without disrupting ongoing production.

**Areas of competence of TU Vienna:**

- Basic technologies for CPS from computer sciences and electrical engineering
- Application-specific production of the Faculty for Mechanical Engineering and Business Administration

**Optimal support for companies.** The five planned pilot plants will provide added impetus to the Austrian economy and cover various sectors. These pilot factories serve to optimally integrate digitalization and networking in production processes, make use of testing facilities for complex production systems and promote interdisciplinary research in the fields of mechanical engineering, mechatronics, electrical engineering, computer sciences as well as training and further education centers for industry-oriented learning.





ABA-Invest in Austria offers comprehensive services – competent consulting in selecting an optimal site, support in dealing with public authorities and funding bodies, on tax and labor issues or in identifying cooperation partners – all free of charge.

# Best Consulting on Business Location Issues

ABA-Invest in Austria, the consulting company of the Republic of Austria, is the top choice of international investors.

- **Experienced business location consultants** personally take care of you and provide all the contacts you require in Austria. Contact us at the beginning of your expansion project so that you will be given optimal support.
- ABA-Invest in Austria offers **customized information** on Austria as a business location whatever the issue – industries, technologies and markets, political or economic conditions.
- We are happy to advise you on important issues relating to the **selection of an optimal site** e.g. on labor and tax issues, funding or real estate prices.
- The employees of ABA-Invest in Austria provide assistance in **handling formalities** such as funding applications or operating licenses, also in cooperation with the regional investment promotion companies in the federal provinces.
- ABA-Invest in Austria also offers extensive support services for expansion investments even **after project implementation**.
- **Networking:** ABA offers you its cooperation partners, and helps you liaison with the Austrian Trade Commission offices of the Austrian Federal Economic Chamber.
- **Award-winning ABA.** ABA-Invest in Austria has won several awards for its consulting services: World's Best Investment Promotion Agency, World Bank Benchmarking (2009); Global Leader in Online Investment Promotion, World Bank Benchmarking (2012); Second-Best Investment Promotion Agency and third-place award for its program to strengthen Austria as a headquarters location, FDI World Forum (2013).
- **Specialized brochures.** More detailed information on different topics and industries can be found in numerous specialized brochures such as:



- Business Location Austria
- Bridge Between East and West
- Information Technology / Telecom
- Research and Development
- Biotechnology
- Tourism
- Environmental Technologies & Renewable Energies
- Starting Business in Austria
- Tax Aspects of Industrial Investments in Austria
- Tax Comparison Germany – Austria (German only)

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