



Austria*

* Strong Location for
Research and Development

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 Business Location

The Austrian business location stands out in international comparison. Companies profit from a good business environment, qualified employees and a modern infrastructure.

Austria ranks among the most prosperous and innovative countries in the European Union, and has more effectively coped with the economically turbulent period prevailing since 2008 than most other European nations. The business location scores points thanks to its modern infrastructure, top-notch technologies, well-educated and highly-motivated employees, and also offers a high reliability of energy supplies in addition to political, social and economic stability. Moreover, Austria is the ideal base for ensuring market access to the dynamic markets of South East and Eastern Europe.

The Research Location Austria is on the fast track. With a research ratio of 2.8 percent of its gross domestic product, our country invests much more than the EU average. More than 50 industry clusters and customized innovation funding programs ensure an optimal interaction between the business and scientific communities. In spite of this good starting position, we are continually working on creating an even more favorable business environment for companies.

In this spirit we would like to welcome you to Austria.

Reinhold Mitterlehner

Federal Minister of Economy,
Family and Youth



Contents

5	Good Reasons for Research Location Austria	20	Ideal R&D Location for International Companies
6	Innovation Leader by 2020	22	Curtains Up!
10	10 Percent Research Premium and Attractive Tax Advantages	24	Niche and Technology Leaders from Austria
11	Research Funding – Who Pays for it?	26	Specialized Staff? No Problem at All
13	Well Networked –	28	Top Researchers Speak Up for Austria
	Competence Centers and Industry Clusters	31	East-West Interface
18	Renowned Research Institutes		Best Consulting on Business Location Issues

Imprint: Status February 2012; Published by: Austrian Business Agency, Opernring 3, A-1010 Vienna; Responsible for content: René Siegl; Editorial team: Karin Schwind-Derdak (ABA), Doris Passler (Grayling Austria); Design: www.november.at; Photos: Crystalsol: 1, 4, 11; Bosch: 12; RCPE: 13, 14, 15; AVL: 17; Glaxo Smith Kline: 20; Magna: 20; Bionorica: 21; Infineon: 21; BDI: 22, 23; Borealis: 25; IMP: 26; Richard Tanzer (Forschung & Lehre an der TU Wien: 3, 5, 6, 7, 9, 16, 18, 19, 24; TU Graz: 10; Siemens: 28, 29, 30); Printed by: AV+Astoria Druckzentrum

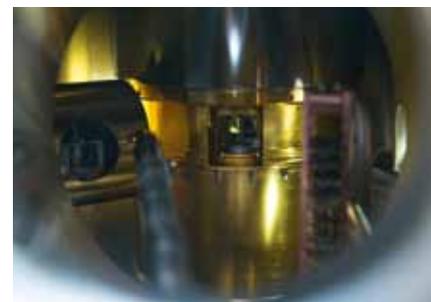


Austria – Land of Research and Development

- 22 public universities
- 13 private universities
- 21 universities of applied sciences
- More than 30 specific research promotion programs
- More than 1,800 research projects in companies
- 208,000 continuing education and training offerings
- More than 1,000 non-university research facilities
- 50+ industry clusters and numerous international R&D headquarters

Good Reasons for Research Location Austria

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



Innovative diversity. Austria's research landscape is dynamic. A large number of universities, universities of applied sciences, non-university research facilities, innovative spin-offs and SMEs, industry clusters and R&D headquarters of international big players continually ensure that inspiring ideas are turned into marketable products and services. High-tech technologies "Made in Austria" are the basis for practical applications or intelligent data security systems. Clever minds in biotech laboratories develop effective medicines against cancer. Intensive research is being carried out on smart grids i.e. the intelligent electricity networks of the future. In the meantime, preserving natural resources is a key issue in Austria in almost all fields of innovation.

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 confront throughout Austria:

- Customized funding, incentives and financing of application-related and basic research
- Ten percent research premium and attractive tax advantages
- A dense network between the scientific and business communities in the form of competence centers and industry clusters
- 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) and mobility and traffic
- Proximity to South East and Eastern Europe
- Excellent living and working conditions



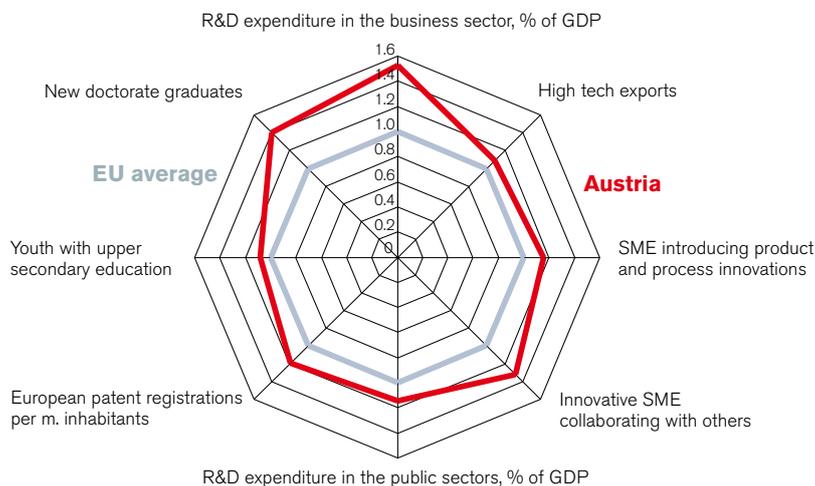
Innovation Leader by 2020

Austria has long focused on research, development and innovation and thus boasts a high research ratio in international comparison.

Full speed ahead. Within Europe, the country on the Danube has successfully sharpened its profile as a sought-after research location for future-oriented sectors such as life sciences, environment and energy, information and communications technology (ICT) or mobility and traffic. At present, the Innovation Union Scoreboard (2011), the annual ranking of the innovative performance of the EU-27, puts Austria eighth and thus among the top third of the most innovative countries in Europe. In several areas of the innovation ranking, such as human resources and research systems, the Alpine Republic even came in fourth in the category “intellectual capital”.

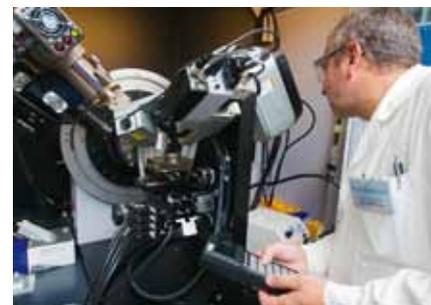
Dynamic growth. The groundwork has been laid for even more innovations. In 2011 R&D expenditures in Austria surpassed the threshold of EUR 8 billion for the first time. Private companies account for the lion’s share of EUR 3.7 billion (44.6 percent), followed by the public sector with EUR 3.21 billion (38.7 percent). A total of EUR 1.34 billion (16.2 percent) in R&D investments was transferred directly from abroad, primarily via subsidiaries of foreign firms.

Austria’s innovation profile is remarkably better than EU average



Source: Innovation Union Scoreboard 2011

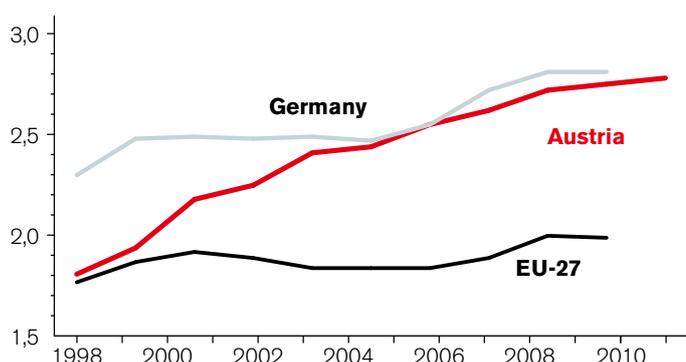
The climate is conducive to research and development in Austria. In 2009 some 500 foreign-controlled companies based in Austria already accounted for half of all corporate R&D spending to the amount of EUR 2.646 billion. In November 2011 22 top international companies based in Austria such as Baxter, NXP Semiconductors Austria, Voestalpine, Infineon, Magna and AT&S committed themselves to increasing their research expenditures by 20 percent by the year 2015. Thus in the future they will finance one fifth of the entire corporate research in the country.



High research ratio. The research ratio i.e. R&D spending as a percentage of GDP has been continually rising for more than ten years, from 1.8 percent in 1998 to 2.79 percent in the year 2011. This surpasses the average of the EU-27, OECD and the USA. The dynamic innovative strength is reflected in a clearly-defined goal for the period until 2020. The objective is to further increase the research ratio to 3.76 percent as stipulated in the Strategy for Research, Technology and Innovation (FTI Strategy) of the Austrian Federal Government. This is considerably higher than the R&D investment volume of three percent of GDP targeted in Europe 2020, the EU's growth strategy.

The fact that the small but excellent R&D location along the Danube plays in the global premier league is illustrated by the 3,560 inventions for which patents applications were submitted to the Austrian Patent Office in 2010. The European Patent Office registered 1,719 applications from Austria, and another 1,138 filed with the World Intellectual Property Organization.

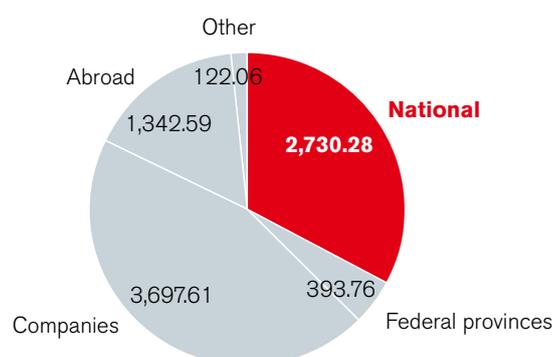
Development of R&D spending in Austria, Germany and the EU-27



Source: ABA brochures 2010 / Eurostat

Austrian investments in R&D

EUR million, estimates for 2011
Total R&D expenditures: EUR 8,286.30 million



Source: Austrian Statistical Office 2011



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

Research outlook 2020

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

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

"With a research ratio of 2.79 percent in 2011 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".

What is necessary in order to advance to the ranks of an innovation leader?

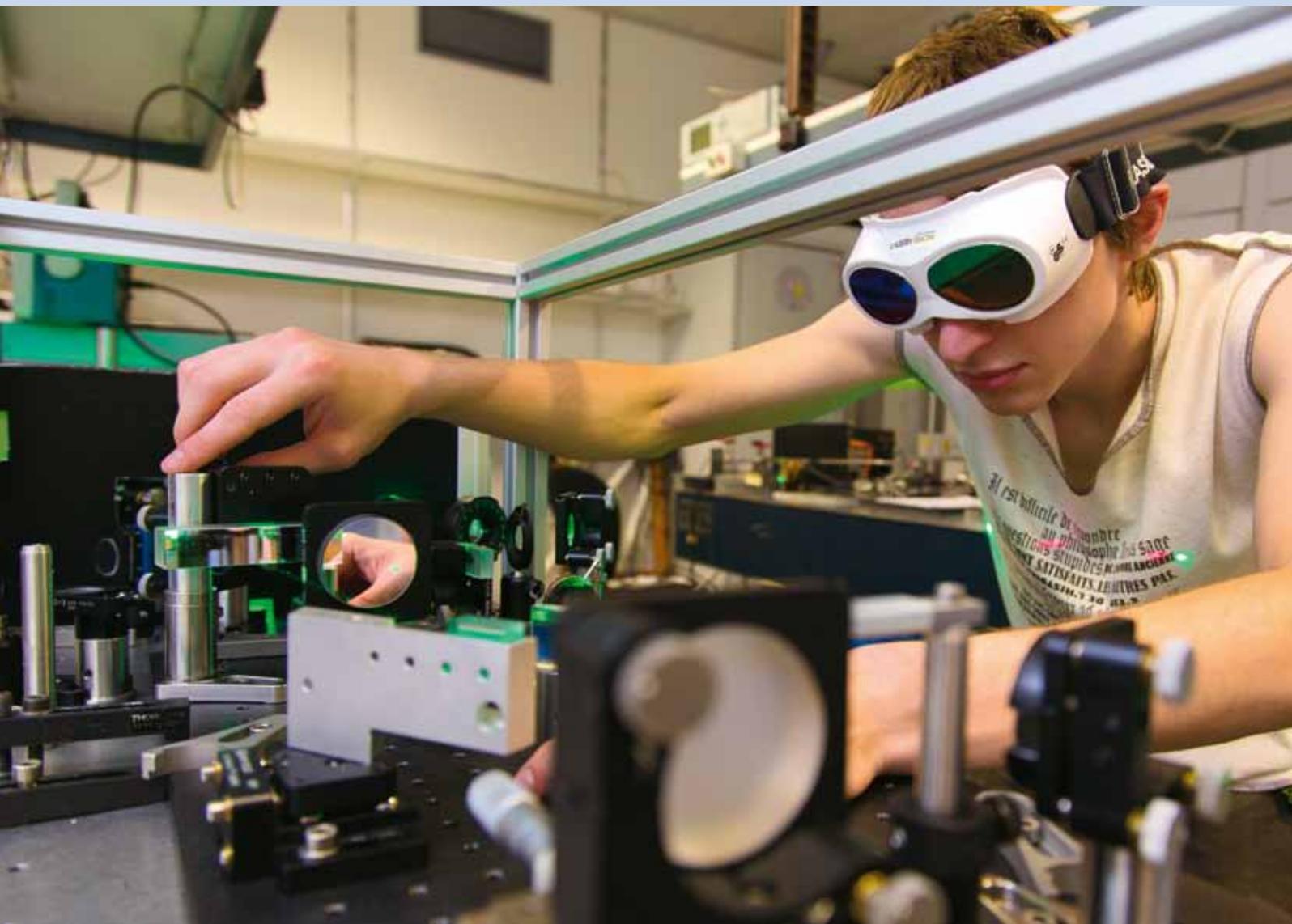
"First, as already mentioned, we have to generate a further dynamic impetus to this R&D process as we did in the first years of the new millenium. In addition, we require more spending, but above all funding used in the right way e.g. by avoiding redundancies or fragmentation and focusing on sustainable investments in future-oriented sectors, above all for education and training, science, research and innovation. Here we are on the right path with the Strategy for Research, Technology and Innovation 2010 (FTI Strategy) being pursued by the Austrian Federal Government if in fact the financing is ideally ensured on the basis of the Research Financing Act announced by the government".

Where do you envision Research Location Austria 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 one of the objectives of the FTI Strategy".

In which fields is the Republic of Austria with the red-white-red colors already achieving 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 List, to name a few. The future can be shaped by building upon the many existing strengths".



TTTech

“Austria is a top location for research and development in embedded computing, and provides valuable economic impetus with its efficient funding landscape. The proximity to important educational institutions enables TTTech to attract the interest of highly qualified employees and to deploy them internationally”.

Stefan Poledna, Member of the Executive Board of the high-tech company TTTech



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 meeting international standards poses major financial challenges to companies and research institutions. For this reason, Austria has reduced the risk of investments. As of the beginning of 2011, the research premium for expenditures relating to in-house R&D as well as contract researcher was raised from eight to ten percent, thus further improving conditions underlying corporate innovations. Companies are legally entitled to this research premium, which is paid in cash.

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

Corporate R&D expenditures
(EUR million)

	EUR million	Percentage of foreign companies	
	1,352.7	69.9%	Electro/electronics
	545.2	48.1%	Machinery/equipment
	474.3	80.2%	Vehicle construction
	359.3	50.6%	Chemicals/plastic/glass
	192.5	91.8%	Pharmaceuticals
	258.4	17.2%	Metals
	3,435.4	60.4%	Total production sector

Source: Austrian Statistical Office, 2011

Research Funding – Who Pays for it?

There are suitable incentives for good R&D ideas. It pays to inquire. Austrian funding bodies support application-oriented research as well as basic research.



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 operating in all business sectors, including subsidiaries of foreign industrial groups.

The portfolio: basic funding 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 a research headquarters in Austria will find the right funding via the headquarters program.

In 2010, FFG had funding commitments of EUR 555 million, and distributed EUR 411 million in funding to innovative companies for the development of new products, processes and technologies.

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 established large companies. The development of prototypes, pilot, demonstration and testing facilities is enabled by financial grants, low interest loans, assuming liabilities or providing guarantees.

Austrian Science Fund (FWF)

The Austrian Science Fund (FWF) is the counterpart to industrial and commercial research, supporting basic research which does not primarily focus on the commercial exploitation of scientific findings. FWF and FFG offer special compatible funding programs for application-related basic research with a realistic potential for commercial exploitation and corporate interest.

Funding/research
promotion programs:

- www.ffg.at
- www.awsg.at
- www.fwf.ac.at
- www.bmwf.gv.at
- www.bmvit.gv.at
- www.foerderkompas.at



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

The choice is Austria

Klaus Huttelmaier is a longstanding manager at Bosch and from Germany. He is convinced of the merits of Austria as a research location.

Robert Bosch AG is expanding its R&D location in Vienna with about 100 new employees. Why did it specifically choose Vienna?

"We want to strengthen the leading role played by the Vienna competence center for engine control units for gas and diesel drive systems within the global group in the future. For this purpose we primarily require motivated and optimally qualified specialists which we can find in Austria. Why? Because most of our junior staff in R&D already bring a sound technical and practice-oriented education at one of Austria's polytechnic schools or technical universities to the company. And at Bosch we also make targeted investments in the continuing education and professional development of our employees, especially for R&D. The selection of a suitable location mainly depends on labor and wage costs, employment regulations, funding such as the research premium and other tax advantages. In all these areas Austria and particularly Vienna is attractive for the subsidiaries of international companies."

What role does R&D in Austria play within the global Bosch Group?

"We are part of a leading, global technology and service company in the field of motor vehicle, industrial and building technology, and operate in an international network. In 2011 the Bosch Group invested more than EUR 4 billion in R&D on leading-edge technologies, and filed applications for more than 4,100 patents worldwide. Austria makes a major contribution to these successes. Accordingly, Robert Bosch AG is a leader in the fields of common rail injectors for commercial vehicles and large diesel engines, electronic control systems for gas, diesel, hybrid and electric motors and range extenders. As a result, the research expenditures in Vienna, Linz and Hallein were correspondingly high in 2010, amounting to EUR 76.5 million or a research ratio of about 16 percent. We want to continue this in the future. Austria is a good and important business location for Bosch."

→ www.bosch.at

Well Networked – Competence Centers and Industry Clusters

Considerable importance is placed on strategic partnerships between companies and research facilities.



Bundling know-how. “A knot cannot be tied with one hand only” is an old Mongolian jewel of wisdom which is becoming increasingly important in innovation competition. 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 specific industry clusters. These are designed to exploit synergies and future potential and create strong networks to work on developing trend-setting, future-oriented and profitable solutions.

More than 40 competence centers

One of the most successful Austrian funding initiatives is COMET (Competence Centers for Excellent Technologies). For many years COMET has succeeded in promoting the targeted and sustainable cooperation between industry and science with respect to the leading-edge technologies in the country by creating suitable framework conditions.

Today 46 such competence centers bundle their internationally sought-after R&D know-how, thus ensuring attractive competitive advantages, also for foreign investors. During the entire duration of the COMET funding initiative (2006-2019), a total of EUR 1.5 billion will be invested in industry-related research.

Excellent cutting-edge technologies. Accordingly, Big Pharma companies are relying 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), and “Bioenergy 2020+” boasts several research facilities in Austria and successful innovations in environmentally-friendly energy production from biomass.



Johannes Khinast, CEO
of the Research Center
Pharmaceutical Engineering
(RCPE)

Partnerships really matter

RCPE – founded within the COMET program – is an international hotspot for pharmaceutical process and product development.

The competence center Research Center Pharmaceutical Engineering is unique in Europe. What makes it stand out?

“Due to our focus on a special field of research, we offer highly sought-after solutions for Big Pharma companies such as Pfizer, GlaxoSmithKline, Roche, Novartis, Sanofi-Aventis, Bayer, Astra Zeneca, Abbott and Merck. We work together with ten recognized scientific institutions in Austria and abroad, such as the Graz University of Technology, the Vienna University of Technology, Karl Franzens University in Graz as well as Cambridge University and Rutgers University in the USA. This offers clear advantages: we research in a corporate-oriented manner, take advantage of partnerships with excellent key researchers and have access to a state-of-the-art laboratory infrastructure. There are only two comparable non-university research institutions in the world.”

To what extent do partnerships with the RCPE pay off for pharmaceutical companies such as Baxter, GlaxoSmithKline or Roche?

“R&D conducted with us is a lower-risk and less expensive undertaking. A company which develops a new drug needs an average of 10-12 years for it, with costs of EUR 1-2 billion. For this reason, research partnerships in the pharmaceutical sector have long been the key to success. The bundling of valuable know-how and scientific resources enables more efficient work to be done. 48 national and international companies are already relying on the quality of our research services, as reflected in an order volume of EUR 17 million. Thus we also naturally strengthen Austria immensely as a research location.”

In just three years the RCPE has quickly grown and now employs a staff of 80 highly qualified employees from Austria and abroad.

→ www.rcpe.att



“The Austrian networks linking industry and science are unique. This is the way things are done!”

Harald Katzmaier, network researcher



More than 50 industry clusters

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

More than 50 industry clusters located in all nine federal provinces, featuring some 3,500 companies and 420,000 employees, work to strengthen Austria's innovative capabilities.

Eco World Styria. There has already been recognition from the USA for this "partner-oriented" innovative approach in Austria. In 2010 the Styrian cluster ECO WORLD STYRIA was ranked as the world's number one energy and environmental engineering cluster by the U.S. Cleantech Group. Styria is considered to be the "green tech valley" in the heart of Europe, but still within only one hour by car to more globally leading green tech companies than anywhere else. Some 200 firms and research facilities are linked in this cluster, such as Binder+Co, the technology and market leader in recycling or BioEnergy International AG whose R&D focus is on biogas facilities, BioCrack and microalgae as renewable energy sources. Andritz Hydro, a specialist for hydropower plants, also exploits the advantages of the network offered by the Styrian cluster.

LISAvienna – Life Science Austria Vienna. Vienna offers more than just the best quality of life in the world. Vienna is also an internationally sought-after R&D location for life sciences. The capital of Austria is home to more than 400 companies in this sector, including 99 firms in the core segment of biotechnology and medical engineering, such as Boehringer Ingelheim, Otto Bock and Baxter, which research, develop and produce innovative products and drugs. The companies are optimally linked to 22 outstanding research institutes. On balance, about 9,000 scientists and highly qualified specialists work in the field of life sciences in Vienna. They generated revenues of EUR 1.7 billion in 2010.

Mechatronics Cluster (MC). Mechatronics – an invented word and interdisciplinary segment encompassing mechanics, electronics and computer sciences – established itself in Upper Austria as a future-oriented area of research. The latest developments in mechatronics are major drivers of innovation for companies such as Artaker CAD Systems, Robert Bosch Diesel Development, Siemens and Carl Zeiss Industrial Measuring Technology. A key factor underlying success in high-tech industry is the ability to exploit synergies and trends. For this reason, more than 300 partners from the fields of mechanical and plant engineering, equipment manufacturing, technology and machining technology and component manufacturing join forces with R&D and educational institutions such as Johannes Kepler University Linz and thus increase their long-term competitiveness.

→ www.clusterplattform.at

→ www.eco.at

→ www.LISAvienna.at

→ www.mechatronik-cluster.at

→ www.acstyria.com

AC Styria. About strategic cooperation in the automobile industry and the role of AC Styria, Austria's first automobile cluster which now boasts 180 partners generating annual revenues of EUR 10 billion:

What advantages does the automobile cluster AC Styria offer to companies such as AVL or foreign investors?

"Today Styria is considered to be a melting pot for the latest developments in the automotive sector because the comprehensive industrial competence of an entire region has been successfully made known abroad thanks to clusters such as AC Styria. Multinational companies based in the region such as AVL and MAGNA as well as innovative SMEs or the sought-after competence center VIRTUAL VEHICLE have all contributed to this process. The technical universities and universities of applied sciences have also made an important contribution."

How will the special strengths of AC Styria develop over the next ten years?

"The Strategy 2020 is being pursued in line with the motto "Green Cars – Clean Mobility", helping innovative technologies and solutions designed to reduce the environmental burden of mobility to attain market maturity – especially in the core areas of ECO-powertrains, ECO-materials and ECO-design as well as smart production. Thus Christian Doppler laboratories focusing on the "life span of battery systems" are already being set up at the Graz University of Technology, and a modern battery testing center is being established as a cooperation project of AVL with domestic and international partners".

AVL is the world's largest privately owned company for the development, simulation and testing of powertrains such as combustion engines, hybrid systems, electric engines, batteries and software. The company generated revenues of EUR 830 million in 2011 with more than 5,000 people worldwide. The research ratio is 12.5 percent.

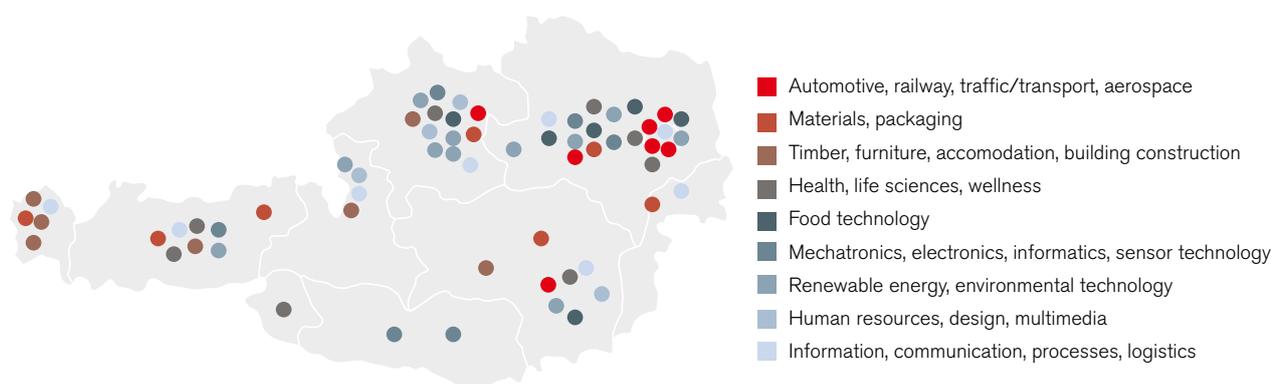


Josef Affenzeller, Director of National and International Research at AVL

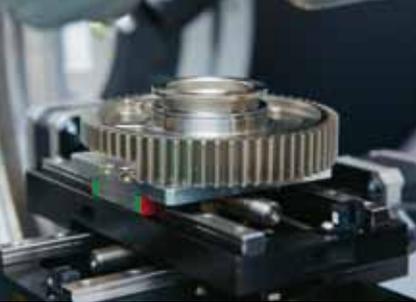
→ www.avl.com

Clusters and networks

in the Austrian provinces and supraregional initiatives



Source: Clusterplattform



Renowned research institutes

Austria's non-university research facilities have a good reputation across the globe. 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 quadrupling over the last ten years. More than 5,000 people are employed at over 50 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. The dynamic impetus provided by good ideas is being selectively supported by Austrian Cooperative Research (ACR), the umbrella organization for 17 non-university cooperative research institutes of the Austrian business community – featuring impressive successes. Each year more than 23,000 research contracts are implemented, 77 percent for SME customers. The institutes belonging to the ACR network achieved revenues of approx. EUR 51 million in 2010.

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 five departments (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. International companies such as Siemens, Magna, OMV and AVL have long had confidence in the competencies of AIT – ranging from individual contract research or the implementation of large projects with universities and industrial partners.

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 such as Kapsch, Roche and Volkswagen. 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 60 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 120 international industrial partners such as AVL, Infineon, OMV, Sandoz, voestalpine, Biomay, Lenzing and Plansee already relied on this form of private public partnership in the year 2011.

Ludwig Boltzmann Gesellschaft. 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 emphasis is placed on human medicine, life sciences, humanities, social sciences and cultural studies. 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 Nebu-Tec.

Other facilities. Other recognized research partners for industrial companies include arsenal research in Vienna, salzburg research in Salzburg and Carinthian Tech Research in Carinthia.



- www.acr.at
- www.ait.ac.at
- www.cdg.ac.at
- www.lbg.ac.at
- www.joanneum.at

Ideal R&D Location for International Companies

Companies from all over the world, often the subsidiaries of international companies, give an insight into their operations. How do you profit from the Research Location Austria?



Evelyn Schödl, Vice President and General Manager of GlaxoSmithKline Austria

Highly professional R&D. GlaxoSmithKline is convinced of the quality of the R&D output and of the Austrian biotech research landscape, as demonstrated by numerous licensing agreements the pharmaceutical giant has concluded.

“GlaxoSmithKline has invested, for example, in the three Austrian biotech companies AFFiRiS, Intercell and Apeiron, and numerous studies are underway at universities and clinics. We are organized in small research teams, and value this structure at our R&D partners. The financing models are flexible, from complete autonomy to acquisition. The fact that we are on the right path is underlined by our strong pipeline with more than 30 Phase III projects underway at present, which according to analysts is the strongest track record in the industry. In order to maintain the high quality of Austria as a research location in the future, it is important to continue to focus on ensuring high educational standards, starting at school all the way up to universities. The commitment of the political decision makers including the willingness to provide financing is very important in this regard.”



Günther Apfalter, President Magna Europe & Magna Steyr

Innovative, creative and cosmopolitan. Magna Europe & Magna Steyr emphasizes 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 location for Magna. The company’s cooperation with the Frank Stronach Institute (FSI) of the Graz University of Technology is a unique type of cooperation in Austria. As a private public partnership it is a bridgehead linking science, education and business. Since 2003 the FSI has been carrying out research and development in completely new areas thanks to its state-of-the-art technical equipment. Together with Magna it generates new impetus for the mobility of the future. Innovative, creative and cosmopolitan personalities are ultimately not only the pre-requisite for the ongoing further development of the company, but also for Austria as a business location.”

Unique expertise. Innsbruck offers excellent conditions for R&D to Bionorica, Germany's largest producer of herbal medicines.

"The strategic decision for Austria as a research location was made years ago, for example because there are several university chairs in pharmacognosy, amongst other reasons. This is something special, if you consider that German institutions have converted their facilities in this area into biotechnology institutes which do not offer classical botany but only research on a molecular biological level. Thus the Austrian expertise in pharmacognosy is unique. In connection with perfect scientific networking and intelligent research promotion measures, this substantially contributes to our success, for example in the field of fundamental analytics. At present 20 research projects in cooperation with more than 30 scientific and business partners are being implemented by Bionorica research in Tyrol. Applications for several patents, for example for the development of extracts with specific pharmacological effects have already been filed. We are in a future-oriented market. It is a fact that high quality phytopharmaceuticals with scientifically confirmed effects and minimal side effects are highly sought after alternatives around the world to chemical and synthetic drugs."



Michael Popp,
CEO of Bionorica Research

Innovative creative will. Infineon invested more than 200 million euros in Austria in the last year. The lion's share was for a technical "revolution" i.e. the world's first pilot production line for 300 mm thin wafers for chips.

„Infineon Austria has acquired an internationally recognized reputation thanks to its focus on specified technological competences, and thus attracts specialists from all over the world. A good overall business framework supports the expansion in our business of producing chips, especially R&D work. For somewhat more than 30 years Infineon, at that time the semiconductor division of Siemens, began conducting microelectronic research in Villach. Today 950 employees or close to 35 percent of the total workforce at Infineon Austria are involved in carrying out R&D. An additional 250 researchers work in the semiconductor industry for newly-established spin-offs of the Infineon Group. This is a clear indication of a fruitful environment, whether it involves the quality of the technical education or a tax system conducive to R&D – accompanied by the courage to innovate and intensive research work in a production environment. It is in Austria's interest to promote research and innovation in specified areas. Companies such as Infineon value this commitment by expanding the number of highly qualified jobs or setting up headquarters in the country."



Monika Kircher-Kohl,
CEO, Infineon
Technologies Austria AG



Curtains up! Niche and Technology Leaders from Austria

Specialists Made in Austria research and develop new products and services.

Binder+Co. Thanks to its three-stream system CLARITY, Binder+Co has positioned itself as a synonym for outstanding glass recycling technologies on the international recycling market. The Styrian specialist in the field of processing and environmental technology constructed a modern glass recycling plant for an American recycling company located in Ohio. The latest innovation is a BUBLON facility to manufacture “perlit popcorn”. In close cooperation with the Chinese partner Chi-Che Euro-Technic, the Leoben University of Natural Resources and the FH Joanneum University of Applied Sciences, the company has succeeded in multiplying the volumes of the raw materials perlit and obsidian by 20-fold when heated. The resulting “perlit popcorn” features outstanding insulation properties and is considered to be a “new material” for the construction industry. The world market leader in glass recycling and screening technology has already received several awards for its innovative ideas, including the Austrian National Innovation Prize in 2010 and the Best Open Innovator Award of the Zeppelin University Friedrichshafen in 2011 as the best SME in the D-A-CH region.

Virtual Vehicle. How will vehicles in the future stand out and win over customers? By providing greater comfort and safety combined with lightweight construction, alternative drive systems as the basis for lower fuel consumption and greenhouse gas emissions. In this case, development costs usually climb enormously. The Graz-based research center Virtual Vehicle helps by developing high-tech approaches in the field of cross-linked simulation to reduce costs. By offering solutions for virtual and thus more efficient total vehicle development, the Styrian company is considered to be a unique partner of leading premium brand automobile manufacturers in Europe such as Audi, BMW, Porsche, Daimler, Renault and VW. Virtual Vehicle is extremely well positioned in the scientific community. In the meantime, some 80 international industrial partners and more than 25 university research institutes including the Massachusetts Institute of Technology (MIT), the Graz University of Technology, the Technical University of Munich and the Centre de Recherche Informatique de Montreal highly value its expertise. About 200 specialists from Europe, Africa and Asia carry out research at Virtual Vehicle on new, affordable mobility concepts, comprising an order volume of EUR 21 million in the year 2011. The research center’s partners have already made commitments amounting to EUR 68 million for the period 2013-2017.

voestalpine. According to EU statistics, voestalpine is the most research-intensive Austrian industrial company with annual R&D expenditures of more than EUR 120 million. Some 100 R&D cooperation agreements with scientific partners around the world and the intensive development work carried out together with longstanding customers makes the company a global market and technology leader for the high-tech material steel.

Mobility and energy are the most important customer segments of the corporate group which operates in 60 countries, and also comprise the future R&D priorities. voestalpine is the world leader, for example, in lightweight automobile construction with the new phs-ultraform® technology , a special auto body steel. Other innovation highlights are the high speed switch devices, the only ones enabling trains to travel at top speeds of close to 400 km/h whilst ensuring the greatest possible safety.

OVOS. Serious games or knowledge transfer using computer games already represent a billion-dollar business in the Anglo-American region and are now reaching Europe. The City of Vienna recognized the inherent potential years ago and is increasingly focusing on games in its efforts to promote creative industries and has been successful in the process. Today innovative SMEs such as OVOS ensure the excellent international reputation of the Viennese edutainment sector today. In 2011,OVOS was given the German Developer Award 2011 for the best serious game in the German-speaking region of Europe, namely the digital Physics educational game “Ludwig”. This 3D adventure game has been turning Physics classes into a playground for more than 10,000 pupils in the Alpine Republic, and enables children aged 10-14 to do research on renewable energies with excitement and enjoyment. OVOS is also considered to be a top specialist for serious games in Europe and across the Atlantic, and has already presented “Ludwig” at numerous scientific conferences in New York, Lille, Berlin, Munich and Seoul.



BDI - BioEnergy International AG. “From Waste to Energy” is the slogan of BDI - BioEnergy International AG from Graz. As the market and technology, it has already built more than 30 customized, industrial biodiesel plants in Europe, Asia, America and Australia. BDI also focuses on biogas facilities as the basis for converting residual and waste materials into high quality reusable materials. In addition to used cooking oil, vegetable oil, and animal fat, the raw materials used in the production of biodiesel also include biological waste, leftover food and organic industrial waste. The current development of a new process to produce reusable materials and fuels from microalgae is also very promising, in order to make them available at the same high quality 365 days a year regardless of the climatic and environmental conditions. BDI invested about EUR 4million for R&D in 2010 and boasts an extensive patent portfolio.

- www.bdi-bioenergy.com
- www.voestalpine.com
- www.ovos.at
- www.playludwig.com
- www.vif.tugraz.at
- www.binder-co.com

Research Champions in Austria

Companies with the highest R&D expenditures in percent of turnover

Anton Paar	1	19.35
austriamicrosystems	2	18.43
Frequentis	3	16.34
Infineon	4	16.1
Bernecker + Rainer	5	14.13
Siemens Österreich	6	13.42
Boehringer Ingelheim RCV	7	13.21
AVL List	8	12.5
Epcos	9	10.16
Philips Austria	10	7.9

Source: Goldener Trend 2012



Specialized Staff? No Problem at All

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

Reservoir of top-notch employees. In order to bring innovations to market, one does not only require good ideas from R&D, but also highly qualified specialized staff for the practice-oriented implementation. Application-oriented education and further education have a long tradition here, whether at the numerous higher technical colleges (HTL), 22 public universities or 21 universities of applied sciences with more than 370 courses of study. 5.4 percent of the gross domestic product is devoted to educational measures. The average expenditures per pupil or student during the person's entire educational career amounts to USD 11,852, significantly higher than the OECD average of USD 8,831. Moreover, close to 90 percent of all Austrians conclude a vocationally-oriented training. In terms of labor productivity per employee in manufacturing industry, Austria is ranked third in the EU-27 according to the EU Commission in 2011. Special mention must be made of the high level of motivation and the strong identification of employees with corporate objectives.

A new home. Well-trained specialized employees as well as researchers are internationally mobile in a global society. Companies in Austria enjoy a major advantage. 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.

Education for the economy

Annual costs per pupil/student in US\$

Switzerland	14,977
USA	14,923
Norway	13,285
Austria	11,852
Netherlands	10,704
United Kingdom	10,051
Japan	9,673
France	9,562
Italy	9,149
Germany	9,115
OECD	8,831
Czech Republic	5,895
Poland	5,135
Slovakia	4,446

Motivated workforce

10= Employees identify with company objectives

Switzerland	1	8.05
Denmark	2	7.76
Austria	3	7.73
Germany	5	7.39
Japan	7	7.35
Netherlands	10	7.17
USA	20	6.55
Belgium	27	5.87
Czech Republic	31	5.78
United Kingdom	31	5.24
Italy	41	5.2
Poland	46	5.08
Hungary	47	5.03
France	50	4.78

The best minds

Borealis, one of the leading international providers of basic chemicals and plastic, praises Austria's strength in human resources.

Does Borealis find excellently trained employees in Upper Austria?

"Austria understands how to promote and generate the required human resources, especially in plastics technology, for innovative companies such as Borealis. For example, the field of polymer chemistry has been strengthened with the founding of the Center for Catalyst and Process Technology at Johannes Kepler University. A sufficient supply of junior employees is also ensured by the newly created course of studies in plastics engineering and technology at the University of Linz. Both are major gains for the Borealis research center in Linz as well as other flagship companies in the plastics industry in Upper Austria, and naturally for Austria as a research location. This positive trend is also internationally recognized, because the region is increasingly emerging as the Silicon Valley for plastics."

How strong is the plastics engineering industry in Upper Austria and in international comparison?

"Upper Austria is a step ahead. Accordingly, half of Austria's total revenues in the polymer industry are generated here. Moreover, several flagship companies as well as Borealis are European or global market leaders. In 2010 our Group posted revenues of EUR 6.3 billion. 500 employees around the world work in innovation centers in Austria, Finland and Sweden. Investments in R&D amount to EUR 84 million."

What arguments would you use to attract top international researchers to Borealis in Austria?

"If one is interested in plastics, there are only a few companies which can work at the same level as we do. That is the best argument in favor of a job offer from Borealis and our leading global commitment to R&D. Moreover, Austria is a safe country with a very good infrastructure, nice people and wonderful recreational activities. It is not without good reason that Austria has the highest quality of life in the EU."



Alfred Stern, Senior Vice President Innovation & Technology at Borealis

→ www.borealis.at



Jan-Michael Peters, the Deputy Scientific Director of the Research Institute of Molecular Pathology (IMP)

Top Researchers Speak Up for Austria

Scientists need the right environment in order to pursue a career in research and development. Many of them find Austria to be just the right research location.

Effective magnets. Jan-Michael Peters, renowned cell and molecular biologist from Germany, is the Deputy Scientific Director of the Research Institute of Molecular Pathology (IMP) in Vienna and Wittgenstein prize winner in 2011.

Why are you currently doing research in Austria?

"The working conditions at the Research Institute of Molecular Pathology (IMP) in Vienna are optimal, including state-of-the-art equipment and a creative, international environment. As the father of two children I have also learned to appreciate the high quality of life in Vienna and its surroundings."

And what does Austria offer international life science companies as a research location?

"This can be explained in a few words: excellent graduates of numerous colleges, research in life sciences at an internationally high level, and naturally economic and political stability. Moreover, the central location in Europe not only attracts exciting companies but also talented university graduates from South East and Eastern Europe."

What role does internationality play in the success of a researcher?

"It is almost 'indispensable' – because our knowledge and the development of new technologies have an effect far beyond a country's borders. Top achievements in research are inconceivable today without international experience and networking. The EU project 'MitoSys' which I am coordinating at the present time is a good example. We are bundling the European competence in the field of cell cycle research to make it an extremely high-powered initiative featuring thirteen participating institutions from eight countries."

How important are prominent names for the image of Austria as a research location in order to lure R&D companies and investors?

"In research as well as in business or culture there are 'drawing cards' such as the IMP which stimulate interest on the part of interesting researchers, institutes and companies. Since it was established 25 years ago it has served as the nucleus of the Vienna Biocenter Campus, where more than one thousand highly qualified individuals carry out life science research at academic institutes and bio-tech firms."

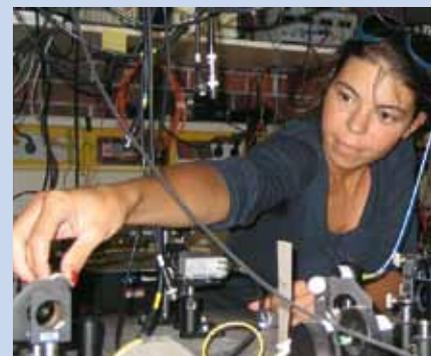
Unique promotion of young researchers

For many international junior researchers Austria is simply the best place to be.

Francesca Ferlaino is pursuing a career at the Institute for Quantum Optics and Quantum Information at the University of Innsbruck. Born in Naples and was recently named a professor for experimental quantum physics. She has been focusing on the rare metal erbium and its promising properties as a quantum gas.

What opportunities have arisen for you as a young researcher in Austria?

"I was lured to Innsbruck by the high quality of research. I absolutely wanted to learn about new techniques to manipulate and control ultra-cold quantum gases, atoms and molecules. The work here in Innsbruck in the group led by Rudolf Grimm, one of the world's best quantum physicists, has more than exceeded my expectations. Here top researchers and young scientists are working in an incredible synergy. I value the local and international research partnerships and the system of promoting young researchers in Austria, which I have certainly benefitted from."



Francesca Ferlaino, Professor for Experimental Quantum Physics at the University of Innsbruck



East-West Interface

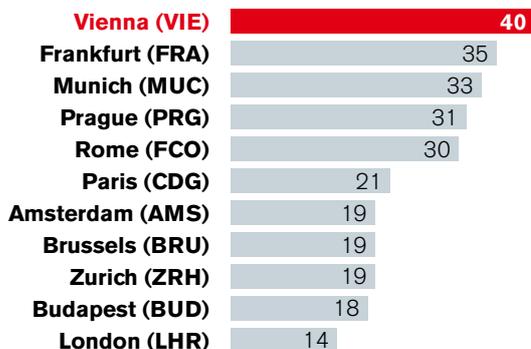
Whoever works and researches in Austria does this in the heart of Europe, and in direct proximity to dynamic growth regions.

Springboard to lucrative business. Privileged by its geographical location in the heart of Europe, Austria has positioned itself as the business interface for the growth markets of Central and Eastern Europe. Boasting more than 300 regional corporate headquarters, the Alpine Republic is significantly ahead of competing CEE locations such as Poland, Slovakia, Czech Republic or Hungary. Some 1,000 international companies coordinate their CEE business operations from Austria.

Research-intensive companies such as Boehringer Ingelheim, one of the world's top 15 pharmaceutical firms, are relying on the small but excellent location of Austria. With investments of EUR 143 million annually, the pharmaceutical giant carries out its cancer research in Vienna, and also manages its entire clinical research in Central and Eastern Europe, Israel, Turkey and South Africa from its Austrian base.

Vienna takes off

Number of destinations in Central and Eastern Europe



Headquarters Champion

Number of regional headquarters

Country	Headquarters
Austria	303
Hungary	17
Poland	16
Czech Rep.	13
Slovakia	3

Technology leader from Austria

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

Considering South East and Eastern Europe, what does Siemens particularly value about Austria as a research location?

“For a long time now Austria has been an important player in the research landscape of Siemens. The company not only values the high technological competence but also the good and mature ties to the target markets in Central and Eastern Europe. Naturally these are important prerequisites for high-tech projects and new market opportunities in the CEE region.”

What are the strengths of “Corporate Technology CEE Siemens” (CT CEE)?

“The internal competition among the 150 R&D centers around the world is enormous. For this reason it is important to provide the basis for outstanding achievements by the best minds in selected cutting edge technologies. For example, we succeed here with our two Viennese headquarters focusing on application-specific chips (ASICs) and constraint-based (complex) configurations. We significantly shape the technology strategy of the Group with more than 1,300 highly qualified researchers and developers, for example focusing on future issues such as smart grids or rail-based passenger traffic with the newly created competence center ‘Metros, Coaches and Light Rail’ in Vienna. Orders worth millions for the metro generation ‘Inspiro’ developed here have already been placed by Munich, Warsaw and Oslo.”

Siemens not only relies on R&D in the Group but also on strategic partnerships with universities. Why?

“We have considerable in-house research talent. But a company is not the right environment for everyone to unfold his scientific creative potential. In accordance with the concept of ‘open innovation’, we conclude targeted partnerships with renowned universities in Austria and abroad.”



Edeltraud Stiftinger, Head of
Corporate Technology CEE
Siemens

→ www.siemens.com



ABA-Invest in Austria offers comprehensive services – competent consulting in selecting an optimal business location, 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 **choice of an optimal business location** 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**.
- Or profit from the **international network** of ABA-Invest in Austria offices in Vienna, New York and Tokyo as well as the foreign trade offices of the Austrian Federal Chamber of Commerce.
- **Specialized brochures.** More information on various issues and sectors 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)

In Austria:

ABA-Invest in Austria
Operring 3
A-1010 Wien
Tel.: +43-1-588 58-0
Fax: +43-1-586 86 59
E-Mail: office@aba.gv.at

In the U.S.:

ABA-Invest in Austria
120 West 45th Street, 9th floor
New York, N.Y. 10036, USA
Tel.: +1-212-398 1221
E-Mail: office-usa@aba.gv.at

In Japan:

ABA-Invest in Austria
3-13-3 Motoazabu
Minato-ku
Tokyo 106-8691, Japan
Tel.: +81-3-3796 1331
Fax: +81-3-3796 1332
E-Mail: aba-tokyo@advantageaustria.org

Internet:

www.investinaustria.at
www.investinaustria.cn
www.investinaustria.ru