

# Industry & Science in Styria

With an R&D intensity of 4.7%, Styria is the most innovative *Bundesland* (federal state) of Austria and is one of the leading regions of Europe. A further outstanding characteristic of Styria is the level of synergistic cooperation between industry and non-commercial research.

- 1,215,246 population (on 31.12.2013)
- 16,401 km<sup>2</sup> land area
- 42.7 average age of the population in years
- 84.0/78.9 average life expectancy f/m
- 39.065 regional GDP 2013 in billion euros
- 599,000 people in work 2013 (including self-employed)
- 66,626 active enterprises
- 179 large enterprises 2013 (> 250 employees)
- 31 impulse centers
- 4.7 (%) R&D intensity 2013
- 1.75 (bn) research spending 2013
- 49.0 exports as % of total revenues 2013
- 9 third-level educational institutions
- 13 non-university research centers
- 23 competence centers and projects
- ~55,000 students 2012/2013
- 2,682 graduates in engineering subjects 2012
- 9.9 % of third-level graduates in population

- Medical University of Graz (Med Uni Graz)  
*Medizinische Universität Graz* [www.medunigraz.at](http://www.medunigraz.at)
- University of Graz  
*Karl-Franzens-Universität Graz* [www.uni-graz.at](http://www.uni-graz.at)
- Graz University of Technology (TU Graz)  
*Technische Universität Graz* [www.tugraz.at](http://www.tugraz.at)
- University of Music and Performing Arts Graz  
*Kunstuniversität Graz* [www.kug.ac.at](http://www.kug.ac.at)
- Montanuniversität Leoben* [www.unileoben.ac.at](http://www.unileoben.ac.at)
- Universities of Applied Sciences (*Fachhochschule, FH*):  
FH JOANNEUM [www.fh-joanneum.at](http://www.fh-joanneum.at)  
FH Campus 02 [www.campus02.at](http://www.campus02.at)
- Styrian College of Education [www.phst.at](http://www.phst.at)
- Catholic University College for Education Graz <http://kphgraz.at>

Sources: [www.wbis-stiermark.at](http://www.wbis-stiermark.at), Statistics Austria, Statistical Department of Styria, 2013 Economic Report of Styria, Die steirische Wirtschaft in Zahlen (The Styrian Economy in Numbers) – Styrian Chamber of Commerce (Wirtschaftskammer) 2013

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Sabine Herlitschka

“I believe it was absolutely the right decision at that time for the Government of Styria to extend cluster activities to a sector such as life sciences.”

“In the 15 years of its existence, Infineon has experienced more change and development than many companies in a hundred years.”

“We provide technologies that account for only a small fraction of the overall product costs and have big benefits. This is how you can make growth affordable.”

“We want to work with the best and I hope we’re attractive to the best.”



## Bundling Positive Energies



In this interview with Franz Zuckriegl, Dr. Sabine Herlitschka, CEO of Infineon Technologies Austria AG, reminisces about the how the Human Technology Cluster began ten years ago in Graz and reflects on the challenges she now faces as head of an international concern.

**botenstoff:** Dr. Herlitschka, Infineon has an R&D intensity of around 23% and your own background is in university-based science. Back in 2004, when the Human Technology Cluster was founded, you were vice-rector for research management and international partnerships at the Med Uni Graz. Where do you see the biggest differences in the day-to-day management of a university and a commercial company?  
Sabine Herlitschka: The differences aren't as big any more as you would have imagined in earlier times. The universities think more like businesses than they used to. I worked at the university in the phase when the Austrian universities were being made legally autonomous. At the same time, we took the medical faculty of the University of Graz and transformed it into a separate medical university, the Med Uni Graz. In that phase, it was very relevant to think about many things in an entrepreneurial or business management way – and it helped us succeed with many of the things we were trying to do. The founding of the Human Technology Cluster became possible because multiple interested parties came together and created it as a joint initiative.

On the other hand, as an organization, Infineon is about twice the size of the Med Uni Graz and then it is also part of a big international group. We are responsible for over 3,000 people in Austria and we have to succeed by selling physical products in specific markets. With our focus areas of energy efficiency, mobility and security we also want to help find answers to some of society's big issues.

**b:** When you think back ten years – what did you personally expect from the cluster when it was founded?  
Herlitschka: Clusters are a huge thing here in Styria: just think of the automotive cluster AC Styria. After the collapse of the nationalized industry in the 1980s, the cluster strategy was a major factor in turning Styria into one of Europe's most competitive regions. And when we had this one strong leg to stand on, it was absolutely the right thing to branch out and use the cluster strategy in other sectors, including life sciences. Ten years later, the cluster's success shows that we were right to take the chance when we did. It was a smart decision, because individual organizations – whether they are universities or companies – don't have sufficient mass on their own. And, where else would this approach succeed if not in the 'clusterland' of Styria? For us as a freshly created university, the fact that the regional agencies demonstrably knew how to set up a cluster gave our confidence a big boost.

**b:** If you think about the whole period from then until now – what things succeeded and what still needs to be improved, or strengthened?  
Herlitschka: Well, we have certainly succeeded in bringing together the positive forces, both the universities and the companies. All the organizations involved came together with the best of intentions and with a real will to achieve something for the region. That was successful. The first head of the cluster, Robert Gfrerer, can take a lot of the credit because he did an outstanding job for the first ten years. The success of a cluster depends a lot on having the right personalities in the right positions.

**b:** And turning to the present: Which fields in the Life Sciences are especially attractive for a company like Infineon?  
Herlitschka: Infineon is already working in a number of life science fields and there are many points of contact in the pipeline, for example in lifestyle apps based on smartphones. Sensor technology is going to be a big area, for example for measuring physiological parameters or using electronic microfluidics-based sensors. In the 15 years of its existence, Infineon has experienced more change and development than many companies do in a hundred years. We already invested in the health and medical field many years ago, for example working on 'lab on a chip' concepts and on wearable electronics. Today we are concentrating

on our three focus areas of energy efficiency, mobility and security. And clients regularly come to us with inquiries about developments in the life-science sector.

**b:** What do you see as really big themes of the future?  
Herlitschka: Energy efficiency is definitely one. Saving energy is one of the biggest energy resources of all. The potential for improving energy efficiency is breathtaking, and the same goes for mobility. In these areas we provide technologies that account for only a small fraction of the overall product costs and have big benefits. This is how you can make growth affordable. Data security is another big topic – so, for example, we produce the chips for the passports of US citizens. How did we manage to get this job as a European company? We developed a technology that allows encrypted processing of data. Of course, this kind of technology could also have a role in the healthcare sector, for example with 'ELGA', the electronic patient file.

**b:** Infineon itself almost has its own cluster in its network of suppliers. How do you involve your suppliers in what you're doing?  
Herlitschka: At our location in Villach we have about 2500 employees, out of the total workforce of around 3100 people in Austria. If you add all of our suppliers, then it comes to a total of almost 4000 people who are constantly in contact with us and who work with us. With some of these suppliers we can say there is a conceptual partnership, that is, we are doing developments together. That's especially true of manufacturing. SMEs usually get in touch with a large industry player like Infineon because the

things we are interested in are the same or complementary in some way. We want to work with the best, and I hope we're attractive to the best.

**b:** Do you find that being physically close to the supplier companies, like here in Villach, is an important factor?  
Herlitschka: It's an interesting paradox, isn't it, that we communicate with people all around the world and at the same time we find that being close to each other, going for coffee together in the real world in a cafeteria, is so enormously important. And when we get back from the cafeteria, we write each other e-mails about who is going to fly out the next day to go to a meeting in Malaysia ... I think both sides of this are important. But research usually happens in a regional context. That's why the discussion of 'regions in Europe' matters to us, because we too will be able to grow better in a strong region.

**b:** On the subject of R&D: Infineon's R&D intensity of 23% sounds very impressive. What does that mean in hard numbers?  
Herlitschka: It means that in the last business year, we invested 270 million euros of real money in R&D. Of course we also take part in public research programs, whether they are European or national projects or collaborations with university researchers. But you can't do research just based on what you can get a grant for; everything we do is based on deep strategic convictions. If you look at the EU strategy 'Europe 2020', then the work we are doing can definitely contribute a lot to reaching those goals. We have our headquarters in Munich but we are in global competition with China/Asia and the USA.

**b:** Many thanks for the interview!

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