Editorial

On 19th April 2010 the Consulate General of the Republic of Poland in Cologne organised a discussion meeting in a lecture hall on the sixth floor of the building of SuperC RWTH in Aachen. Even though it was incredibly difficult time for the Polish party, because of the national days of mourning after the loss of the President and many outstanding Politicians in an air crash in Smolensk in Russia and despite of the complete closing of the European airspace due to eruption of Eyjafjallajokull volcano in Island, numerous representatives of the Consulate General managed to attend the meeting, among them where: Ms Małgorzata Wejtko - the Consul, the Chief of the Trade and Investment Section of the Consulate General and Mr Bronisław Jaworski - the Consul and Mr Tomasz Badowski - the Vice Consul and also the representatives of the Polish scientific society including Prof. Adam Mazurkiewicz - the Director of the Institute for Sustainable Technologies - National Research Institute in Radom and Prof. Leszek Dobrzański - the Director of the Institute of Engineering Materials and Biomaterials of the Silesian University of Technology in Gliwice together with a group of 4 scientific staff of the Institute: Dr Mirosława Pawlyta, Dr Mirosław Bonek, Mr Łukasz Reimann, MSc and Mr Błażej Tomiczek, MSc. The meeting was opened by Prof. Rolf Rossaint - the Vice Rector for Research of the RWTH Aachen University also Prof. Antonello Monti, Prof. Rainer Leupers, Prof. Michael Modigell, Dr Heinz-Georg Nothofer, Mr Bram Wijlands - the Head of Division for Technology and Innovation Transfer RWTH Aachen University, Mr Stephan Muckel Manager of the Forum Materials Science and Mr Thomas Wendland - the Innovation Consultant of the Chamber of Commerce and Industry Aachen. The aim of the meeting was the exchange of experiences, a mutual presentation of scientific and didactic achievements and search of the fields of further cooperation between RWTH Aachen University and Aachen region and the Polish scientific society. A discussion was vivid, interesting and not without personal reflections of often many-year-long cooperation of Polish and German scientists with representatives of the another country. The meeting was ended with a visit in a few of the leading scientific and industrial laboratories of the RWTH Aachen University. The event should be estimated as an important and holding promise of good future both in Germany and in Poland. Detailed directives concerning joint actions in the nearest future were elaborated.

Obviously the visit in Aachen was a wonderful occasion to familiarise with the City and the University for Polish participants. Aachen is a historic spa city in North Rhine-Westphalia, Germany. It was a favoured residence of Charlemagne, and the place of coronation of the Kings of Germany. It is the westernmost city of Germany, located along its borders with Belgium and the Netherlands, 65 km west of Cologne. Rheinisch-Westfaelische Technische Hochschule - the RWTH Aachen University is a research university located in the city. With 260 institutes in nine faculties, the RWTH Aachen University is one of European leading institutions for science and research. On 25th January 1858, prince Frederic William of Prussia, the later German emperor, was presented a donation of 5,000 talers for charity, raised by the Aachener und Münchener Feuer-Versicherungs-Gesellschaft, the precursor of the Aachen Münchener insurance company. In March, the prince chose to use the donation to found the first Prussian institute of technology somewhere in the Rhine province. The seat of the institution remained undecided over years; while the prince initially favoured Koblenz, the cities of Aachen, Bonn, Cologne and Düsseldorf also applied, with Aachen and Cologne being the main competitors. Aachen finally won with a financing concept backed by the insurance company and local banks. Groundbreaking for the new Polytechnic took place on 15th May 1865, so exactly 145 years ago, and lectures started amidst the Franco-Prussian War on 10th October 1870 with 223 students and 32 teachers. Its primary purpose was to educate engineers, especially for the mining industry in the Ruhr area; there were schools of chemistry, electrical and mechanical engineering as well as an introductory general school that taught mathematics and natural sciences and few social sciences. Currently around 31,400 students are enrolled in over 100 academic programmes. Over 5,000 of them are international students hailing from 120 different countries.

The RWTH Aachen University is divided into nine faculties: mathematics, computer science, and natural sciences, architecture, civil engineering, mechanical engineering, geological resources and material sciences, electrical engineering and information technology, philosophy (actually all humanities), economic sciences and medicines (including the Klinikum Aachen). The tenth faculty was pedagogical sciences, but it was abandoned in 1989, however teacher education is continued still. In 2007 the RWTH Aachen University was chosen as one of nine German Universities of Excellence for its future concept RWTH 2020: Meeting Global Challenges, earning it the connotation of being an elite university. The RWTH Aachen University is not a campus university. Instead, its buildings are spread over some parts of the city. There are two core areas (midtown and Melaten district), though they are not very distinct. The Main Building and the Kármán Hall are 500 m away from the city centre with the Aachen Cathedral, the Audimax (biggest lecture hall) and the main refectory are 200 m farther. The university is currently expanding in the city centre and Melaten district. The SuperC, the new central service building for students, was opened in 2008. The scientific education students receive in the RWTH Aachen University is firmly rooted in real-world applications.

Work conducted in the research centres in the RWTH Aachen University is strongly oriented towards the current needs of industry, commerce, and the professions. This led to numerous innovations, patents, and licenses. The individual competence centres in RWTH Aachen University collaborate very effectively across departments and faculties in interdisciplinary groups and forums, while still maintaining a strong focus on their own department specialisation.

The university's innovative force is also reflected in the high number of start-ups in the area: Over the past twenty years, about 1,250 spin-off businesses were founded and created around 30,000 jobs in the greater Aachen region. The RWTH Aachen University itself is the biggest employer in Aachen and environs and provides practical vocational training to more young people than any other company or institution in the region. The university will continue to be a driving force in shaping the successful structural change from a region dominated by the mining industry to a modern high-tech centre. The RWTH Aachen University has achieved international recognition in several fields of engineering and science, especially mechanical engineering, electrical engineering, computer science, physics, and chemistry. Two prominent German newspapers, "Handelsblatt" and "Wirtschaftswoche", currently rank the RWTH Aachen University the first place in Germany in the fields of mechanical engineering, electrical engineering, and computer science. In the latest ranking published by DAAD together with the Centre for Higher Education Development and Die Zeit, the RWTH Aachen University also stands on the top among other German universities in the aforementioned fields of engineering and computer science.

The scientists and alumni of the RWTH Aachen University played a major role in chemistry, medicine, electrical, and mechanical engineering. Several scientists affiliated with the RWTH Aachen University have won worldwide acclamations, including the Nobel Prizes in physics and chemistry. For example, the Nobel laureate - Peter Debye received a degree in electrical engineering from the RWTH Aachen University and is known for the Debye model and Debye relaxation. Another example, Helmut Zahn and his team of the Institute for Textile Chemistry were the first who synthesised Insulin in 1963 and they were nominated for the Nobel Prize.

Together with the lord mayor and the cathedral provost of Aachen, the rector of the RWTH Aachen University is one of three automatic members of the board of directors of the International Charlemagne Prize of Aachen. The prize is awarded annually for exceptional contributions towards European unity and ranks amongst the most prestigious European prizes. This year Laureate of this important international prize is the Prime Minister of Republic of Poland Mr Donald Tusk. According to the tradition the prize will be presented with in the City Hall of Aachen on 13th May 2010. Recalling this beautiful city and exquisite University in North Rhine-Westphalia, one should mark this big success of Poland and Polish Eminent Politician, congratulating him a great success.

Reminding PT Readers those important for Germany and Poland events that took or will take place in Aachen in Germany, as usual we encourage PT Authors to publish their papers in our journal, hoping they will meet a vivid interest of PT Readers.

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