

Presse-Information

Press release • Information de presse

DECHEMA e.V.
Theodor-Heuss-Allee 25
D-60486 Frankfurt am Main
Telefon (069) 7564-0
Telefax (069) 7564-201
E-Mail: presse@dechema.de
<http://www.dechema.de>

ACHEMA 2006
28th International Exhibition-Congress
on Chemical Engineering, Environmental
Protection and Biotechnology.

Frankfurt am Main, Germany
May 15 – 19, 2006

Economic Press Conference
Frankfurt am Main, DECHEMA-Haus
April 4, 2006, 10 a.m.

The spoken word takes precedence.

Dr. Alfred Oberholz

Chairman of DECHEMA e.V., Frankfurt am Main
Member of the Board of Management of Degussa AG, Düsseldorf

ACHEMA – economic barometer and innovative force in the chemical industry

Ladies and Gentlemen,

In exactly 40 days from now, AICHEMA 2006 will open its gates for a week in Frankfurt am Main. The international character of the world's leading event for chemical technology, environmental protection and biotechnology will be more pronounced than ever, and more exhibitors will be there than at the previous event in 2003. The Congress Program will be the biggest ever at AICHEMA, and it will include more than 900 lectures. The level of interest from international exhibitors and visitors remains strong.

The chemical industry is driving economic growth

The strength and competitiveness of the chemical manufacturing base in Germany is vitally important to the country's technological future. It is very encouraging to see that AICHEMA 2006 will take place at a time when the economy is heading in a positive direction. For the full twelve months of 2005, turnover in the German chemical industry rose to € 152 billion (+6.9 %) and production was up by more than 7 %. We have not seen comparable growth for 20 years. The forecasts for the chemical industry are encouraging as we look into 2006. VCI expects that chemical production will increase by 2.5% and total turnover will rise by 4.5%. This is indeed very good news for the exhibitors at AICHEMA.

The German chemical industry is still number three in the world behind the US and Japan, and it maintains a narrow lead over China. Germany is number one in Europe, holding a 25% share of the market. In 2004, 8% of the chemicals, which were produced worldwide at a total value of €1.776 billion, were made in Germany. The contribution by foreign subsidiaries helped German companies increase their share of the world market to 12.9 %.

Germany exported € 105 billion worth of chemical products in 2005, making it the world's largest exporter for the third year in succession. However, world markets cannot be serviced through exports alone. In terms of number of companies, turnover and number of employees, the German chemical industry now has a presence in foreign countries which nearly matches the domestic base. Roughly one out of every two euros which is invested in the chemical industry is spent outside the country. In Europe, the major locations are Belgium, France and Italy. USA and China are the main locations outside of Europe.

Markets and growth are created where most of the people live. If we look at the 39 mega cities around the world today which have a population of more than 5 million, we see that 23 of them are in Asia. It is therefore hardly surprising that the highest growth rates in chemical consumption during the last ten years were in Singapore (+13.6 %) and China (+12.4 %). Between now and 2010, chemical consumption will increase by 7% a year in Asia compared to only 2.5% in Europe.

It would be a grave misjudgment to look at developing regions as nothing more than new markets. We will no longer live in a world where a few highly industrialized countries with relatively small populations produce everything which the developing countries with large populations need. If the situation were to remain that way, world stability would prove to be a very elusive goal. Worldwide cooperation and the global commitment of our companies are crucial to our own survival in a changing world, and they make a vital contribution to world stability.

The chemical industry is at the beginning of the innovation chain

The chemical industry has key technology, and it is a major innovative force in the overall economy. Nearly 80% of total chemical output is shipped as intermediates to industrial customers. As the key supplier of new materials, it passes innovative ideas on to a large number of other industries and provides a basis for new products and processes in the mechanical engineering, automotive, textile, medical, construction, food and information technology industries.

In Germany alone, annual turnover of new products which are based on chemical innovation amounts to € 17.5 billion euros including flat screen displays, sports equipment, cars and medical equipment. Process innovation, which is driven by advances in the chemical industry, saves around € 11.5 billion annually as a result of lower energy consumption and integrated environmental protection solutions. The ability to innovate is based on intensive research and development and on continual advances in process technology, equipment and systems engineering.

German chemical industry number 3 in R&D expenditure

The German chemical industry invests about € 8 billion euros in R&D annually, making it one of the most research-intensive sectors in the German economy. It is number 3 in the R&D rankings behind the automotive and electrical/electronic industries and just ahead of the mechanical engineering industry. One out of ten chemical employees works in R&D.

Germany is also one of the major R&D centers in the chemical industry worldwide. The country accounts for 17% of global expenditure on applied chemical R&D.

People often ask how much German industry invests outside the country as the process of globalization progresses. When we move production abroad, does R&D go as well? The net effect is surprising according to the Donor's association for the promotion of sciences and humanities in Germany. The globalization of R&D is actually benefiting Germany, as foreign companies increase their R&D spending here. 25% of total R&D expenditure in Germany comes from subsidiaries of foreign companies. The figure was € 12.2 billion in 2003. In contrast, R&D expenditure by German companies in foreign countries amounted to € 10.9 billion, and this figure has not increased. In 2003, Foreign companies spent € 1.3 billion more on R&D in Germany than German companies spent outside the country.

As German Chancellor Angela Merkel has stated on numerous occasions, the German government is sticking to its plans to increase R&D spending to 3% of GNP by 2010. R&D expenditure fell to less than 2.5% in 2004. As a percentage of GNP, Germany is now seventh in the world behind Israel, Sweden, Finland, Japan, Korea, and the US. The average in the EU was 1.82 %, and the OECD average was 2.26%.

According to figures published in the current German National Research Report, total domestic R&D spending in the Federal Republic of Germany amounted to € 54.3 billion in 2003. A total of € 35.9 billion was financed by industry, and this contribution has risen to around 66% from a previous level of about 60%. The government contribution has declined accordingly, and we believe that this puts basic research, which is the cornerstone of tomorrow's production and applications technology, at risk.

To get back on track, the German government will increase R&D spending by € 6 billion over the next four years. The focus of this extra expenditure will be on project funding, because that approach is expected to increase flexibility and provide the biggest payback. The problem will be to set the right priorities.

Annual government funding which was directed specifically at chemical projects was in the € 30 – 35 million range between 2001 and 2004. Two thirds of the funds came from the Research Ministry and one third from the Commerce Ministry. Funding by the Research Ministry for chemical projects was an estimated € 22 – 23 million in 2005, and expenditure is expected to increase by 10 – 20% in 2006 to fund new nanochemical and catalysis projects. These figures do not include spending on materials research, the life sciences and IT which are vitally important to the chemical industry.

The draft budget that was recently approved contains increased support for research which benefits medium size companies. The Federal Ministry of Economics and Technology will provide € 108 million this year for joint industrial research, and the figure will be incrementally increased to € 124 million by 2009. Many ACHEMA exhibitors are involved in these pre-competitive projects. DECHEMA provides coordination support to AiF (the German Federation of Industrial Cooperative Research Associations "Otto von Guericke" e.V.) for this activity.

ACHEMA – a window on the future

ACHEMA is the world's largest forum for the process industries and the equipment suppliers who serve these industries. Visitors have an unparalleled opportunity to keep abreast of what is going on in the industry and to review all of the latest technology and products. No other platform offers such a comprehensive range of complete problem solutions and synergy effects for the full spectrum of process technology applications including plant/apparatus engineering, automation technology, pharmaceutical tech-

nology, packaging, laboratory equipment, biotechnology and environmental technology. No other event worldwide reflects a similar level of ground-breaking expertise.

Biotechnology, nanotechnology, microtechnology and the exploitation of new energy and raw material sources are some of the key sectors which are driving innovation in the industry. Process intensification, bio-refineries, water recycling and gas-to-liquid technologies are currently attracting a lot of interest. New stimulus will come from the ACHEMA Congress and the research and innovation exhibitor group, a technology transfer platform which is supported by DECHEMA,

Many of the universities and institutes which are represented here succeed in finding industrial partners at ACHEMA. These partners use the research results as the starting point for the development of industrial products. You will undoubtedly see a number of new products at ACHEMA shows in the near future which are based on this research. This becomes very evident when you look at the major themes at previous special events which were dedicated to a current topic at the time, for example Computer Aided Design (1985), hydrogen technology (1991), microtechnology (1994), sustainable development (1997) and synthesis, screening and sequencing machines (2000). All of these technologies are now part of the mainstream industrial world.

A new challenge: the transition from oil to renewable energy

Raw materials and energy are two of the most pressing issues which affect the competitiveness of the chemical industry. We have to reduce our dependency on oil and the oil producing countries. This problem will be the main agenda item at a podium discussion, and it will be one of the central issues at ACHEMA.

Ensuring the security of raw material supplies, increasing energy efficiency and reducing the environmental impact of products and processes are the challenges which we will face in the future. The transition from fossil raw materials to renewables will be one of our biggest missions for the next 50 years. The winners will be the companies and countries which are able to find alternatives to the fossil based economy and develop technologies which enable us to use renewable raw materials. The search will not be limited to fuels which give us mobility and energy. The raw material basis of the chemical industry is also at stake.

We need new processes, new product routes, new plants and above all the courage to deploy these new solutions at ACHEMA. You can find out more about the new approaches and the first processes which have been tried.

I am convinced that ACHEMA 2006 will move the entire chemical industry and process technology forward both qualitatively and quantitatively.