

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>

Press Conference, May 14, 2007

China International Exhibition Centre, Beijing / PR China

Statement

Dr. Alfred Oberholz,

Chairman of DECHEMA Society for Chemical Engineering and Biotechnology
and Deputy Chairman of the Managing Board of Degussa GmbH

AchemAsia 2007:

**Innovation and cooperation are the keys to growth in society
and the economy**

Honourable guests, dear journalists, ladies and gentlemen,

AchemAsia 2007, the 7th International Exhibition Congress on Chemical Engineering and Biotechnology, was opened this morning and it is a pleasure for me, as the Chairman of DECHEMA, to welcome you, the journalists and media representatives from all over the world.

AchemAsia's high standard and marked internationalism and expertise have made it the most comprehensive and important event for the process industries in China and Asia.

China is probably more than ever before the global hot spot for the chemical process industries. It is the world's second largest consumer of chemical products, and third largest producer of chemicals after the USA and Japan. In the league of chemical-exporting nations China ranks eighth. China's demand for raw materials and energy continues to rise; and the country has a tremendous need for equipment, new technologies, know-how and project partners.

Routes to sustainability, significantly reducing the effects of climate change and global warming, are the key challenges for the future worldwide, all of which are underpinned by the chemical sciences and technology.

In this context, I will focus on three aspects that will also be in evidence during AchemAsia.

Innovating for a better future: sustainability, the environment, resources, energy

A country's capacity for innovation is at the same time a measure of its future competitiveness. For this reason it is interesting to note that the European Union, Germany and China

are all pursuing very similar courses in identifying their priorities and planning the development of research and technology.

For instance, in 2004 the European Technology Platform for Sustainable Chemistry (SusChem) was initiated to help foster and focus European research in chemistry, chemical engineering and industrial biotechnology. Priority areas include a biobased economy, energy, healthcare, information and communication technologies, nanotechnology, sustainable quality of life, sustainable product and process design. These are recognized to be of major importance for sustainable chemistry in terms of market expectations, societal demand and impact, and the sustainability of the different industrial sectors.

China, too, has set itself the ambitious goal of ranking among the top high tech nations by 2020. The State's Medium and Long-term Development Plan of Science and Technology (2006 – 2020) defines eleven important R&D areas, the key technologies being biotechnology, information technology, new materials, advanced manufacturing and advanced energy technologies. In the rankings for research expenditure, China already comes fourth after the USA, Japan and Germany.

What is really impressive is the annual growth of China's research expenditure, which is currently 20 %. The figure for 2006 was around 37 billion US\$, this means 1.4 to 1.5 % of the GDP. For 2020 a share of 2.5 % is envisaged.

Despite rapid economic growth and jacked-up goals in research and development, the country still faces acute problems. Although China intends to adopt a firmer stance on pollution, two-thirds of her cities are affected by bad air quality and a similar number by water shortage. China is already the second highest source of greenhouse emissions after the United States and is expected to overtake the US within only a few years. By 2010 the government plans to reduce energy consumption by 20% per unit of GDP. However, last year it had already missed its first milestone of 4 %, only reaching 1.2%.

Yet this decoupling is possible. Germany is a case in point. It is not an easy course, requiring as it does creativity, innovations and also harmonized structures in research, development and industry.

We, the organizers of AchemAsia, and our international exhibitors thus consider that our major contribution consists in providing China with the best, most resource-conserving technologies and processes at our disposal – and then jointly refining them.

Intellectual property rights: a key factor in international cooperation

The crucial question for many companies active in China is that of legal security, particularly in connection with intellectual property rights. When China joined the WTO in December 2001 new economic fields were opened up for foreign investment and the legal basis for industrial property rights was significantly improved. But China's biggest problem is the implementation of its many, often very good, laws.

Whereas, in the past, it was almost solely foreign companies that bore the brunt of property right infringement, today Chinese companies are affected, too. Now more and more Chinese companies and research institutions are themselves inventing commercially promising products and processes. This is a chance to cooperate in fair competition.

In chemistry and the life sciences the standard of research in China need not shy comparison with the West. In nanoscience, with 12 % of the world's patents, China has already overtaken Germany and now ranks among the leading nations. The number of chemistry-oriented patent applications is growing exponentially, totalling just under 25,000 in the year 2005.

Nevertheless, over the past few years the losses sustained by industry due to piracy have risen dramatically. In a study on trademark and product piracy in the investment goods industry conducted in Germany in March 2006 by VDMA, around two thirds of the companies claimed to be victims of product piracy, most of them in China. Most cases of piracy are detected at trade shows. Let us hope that the "Measures for the Protection of Intellectual Property Rights during Exhibitions", passed by the Chinese government in March last year, will be superfluous at this year's AchemAsia!

Competition for qualified personnel growing tougher

Invention calls for researchers! With about 1.1 million employees in this sector, China takes the top spot. Moreover China is still expanding her educational and training capacities to boost her innovation thrust.

The number of graduate students in China is growing fast. Whereas in 2004 the number of engineering graduates in Germany was around 37,000 and in the US 213,000, in China the figure was almost 250,000. More and more students tend to study abroad, and then return home with vital know-how. A craving for education, diligence, and a spectacular increase in their self-confidence characterize the young generation of scientists in China.

This is even in evidence at school level: at the international Chemistry Olympics in Korea last year, it was Chinese school children who were the winners, although it was the first time that their country had taken part in such an event.

In the past few years foreign companies have made huge investments in China not only in markets and production plants, but also to an increasing degree in research and technology centres and in cooperations with the top Chinese universities and institutes. China is becoming an increasingly interesting research partner, already a growing number of Chinese institutes does top-level research.

What the industrial nations should bear in mind is that, in future, China will be a serious competitor. On this note, I wish you all many interesting meetings, many scoops and every success for your coverage of this AchemAsia.