Welcoming Address
delivered by

the Parliamentary State Secretary
at the Federal Ministry of Finance,
Hartmut Koschyk MdB

7th International Conference on High Temperature Ceramic Matrix Composites

held in Bayreuth
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As the representative of the Federal Republic of Germany may I welcome you here in Bayreuth to the International Conference on High Temperature Ceramic Matrix Composites.

Since the last conference was held in New Delhi in 2007, the world has changed in many ways: among other things, it has “benefited” from the experience of an international financial and economic crisis.

A good two years ago – after Lehman Brothers went bankrupt – there was a great deal of uncertainty about the future of various national economies. So far the world economy has made it through the crisis better than it was expected early last year. Growth is now in some cases picking up faster than the experts thought it would. Even though the recovery cannot yet be

called sustained and risks certainly do still exist, nevertheless it is indeed very dynamic.

The situation appears particularly favourable e.g. in Germany and in many threshold countries. I am confident that the other industrialised countries will fall into step again and that together we shall pull the world economy out of recession.

In Germany the recovery has made an impressive comeback. The economic and financial crisis triggered the worst recession here since the Second World War, with a drop in real gross domestic product of almost 5%.

The latest figures now confirm that in the second quarter of 2010 gross domestic product in Germany grew by 2.2% over the previous quarter –the strongest growth in a quarter this

country has experienced since reunification.

Even though these high rates of growth may weaken somewhat in the further course of the year, we shall on the whole be able to look back on a good year for the german economy.

This trend has received a considerable boost from the comprehensive packages of measures enacted by the German federal government – for stabilising the financial markets on the one hand and for supporting the economy on the other. From the very beginning the necessary economic stimulants were combined with long-term strengthening of the bases for growth and employment.
The German government has committed itself, not least in economically difficult times, to giving the highest priority to investment in

education and research. All measures which improve people’s prospects for the future take precedence in our policies: education and research are two of the central pillars here!

Innovation has always been one of the crucial sources of growth in a country's economy – especially in the developed industrialised countries. Our way through the crisis has confirmed our view that innovation and the knowledge behind it are factors of pre-eminent significance for the economic success of a country.

This applies especially to countries like Germany which – for whatever reason – are located at the top of the international pay pyramid and which – apart from their technical know-how – do not have any significant natural resources.

Studies [e.g. of the OECD] show that innovation and technical progress account for about one third of economic growth. In Germany, for instance, above-average increases in value added and employment have been achieved above all in research-intensive branches: more than 80% of real growth in production in industry in the period 1993 to 2006 was attributable to the research-intensive sector, while the rest of industry accounted for just under one-fifth.

Of course, not all research leads to economic benefits. But a leading economic and technological country must continually develop new products and processes in order to occupy markets with a promising future which make intensive use of human capital and knowledge. Only in this way will it be able to maintain its level of prosperity and employment.

It was for this reason that European Heads of State and Government placed research and development at the top of Europe's political agenda with their decision on the strategy "Europe 2020 – a strategy for intelligent, sustainable and integrated growth".

With "Europe 2020" Europe's Heads of State and Government are holding to the well-known Lisbon objective of achieving a volume of public-sector and private investment in research and development totalling 3% of gross domestic product. This underscores the crucial importance research and development have as an engine of growth for the Member States.

In Germany aggregate expenditure for research and development in 2008 was about € 66.5 billion, more than in any other country in Europe. Since the year 2008, the intensity of research and development in Germany has stayed

relatively constant at about 2.5%, with a rising trend: in 2008, the quota at an estimated 2.67% was significantly above the EU average [1.9%] and is thus coming close to the 3% objective.

Research and development expenditure of the business sector continued to rise strongly in 2008, to € 44.7 billion [+ 6.9%]. According to their targets for 2009, enterprises were intending to invest about the same amount for research and development as in 2008, in spite of the financial market and economic crisis.

If enterprises refuse to cut back on their efforts for innovation in spite of the massive losses in turnover and profits which some of them have suffered, this is a clear indication that they have recognised the crucial importance research and development have for the long-term competitiveness of their businesses.

The German government as well, in spite of all the efforts it is making to consolidate the budget as quickly as possible, has also set clear priorities for education and research and has increased funding for this in the years 2010 to 2013 by a total of € 12 billion. In this way we are making an important contribution to reaching the 3% objective.

Over and above that, the German federal government has continued to develop its High-Tech Strategy and is thus holding to its unified interdepartmental and interdisciplinary innovation policy. This strategy was presented in 2006 as an overall national concept which for the first time united the major actors behind a common idea.

The focus is on co-operation between science and business. Research results with the potential for innovation must be identified and applied in the market quickly and successfully in order to ensure growth and employment. Individual fields of technology are considered to contribute to solving global challenges: health, climate, energy, mobility and security form the main focal points.

Within the framework of the High-Tech Strategy, the German government invested a total of € 15 billion in the field of technology and innovation policy through the end of 2009; of this, € 6.5 billion was available for new measures alone. The integrated approach of the High-Tech Strategy has met with wide international approval and has received broad support in academic and business circles.

Besides applied research, basic research also has an important role to play, above all in acquiring new knowledge not aimed at any specific application. Such research forms the point of departure for technical innovation and for the long-term development of the economy and society.

The key benefit of basic research lies in opening up new fields and maintaining or increasing future business output and competitiveness.

In spite of all the efforts undertaken by State and politics in the field of research and technology, it is clear that at last it is always the research institutes and private businesses which must make use of these framework conditions and transform them into concrete innovations.

This is also the purpose which this International Conference on High Temperature Ceramic Matrix Composites is meant to serve. I am very pleased that you have come together here to that end in the region of Upper Franconia.

The region of Upper Franconia is characterised by innovative businesses operating on an international scale, by highly qualified and motivated workers, outstanding infrastructure and transport connections and in particular by first-rate achievements in research and development.

The University of Bayreuth and the Fraunhofer Project Groups “Ceramic Composits” and “Process Innovation” based there and the North Bavaria Competence Centre for New Materials are particularly good examples of the high degree of research and development competence and

innovative strength present in this region.

Above all this region is closely linked to the industrial production of porcelain. After the founding of C. M. Hutschenreuther in the year 1814, porcelain manufacture quickly became a rapidly growing branch of industry here. Today the North Bavarian economic area is still a leader in the manufacture of porcelain. Germany is the market leader in the production of technical porcelain within Europe.

In the year 2010 the German manufacturers in the porcelain industry are celebrating the 300th anniversary of the invention of their “white gold”. Since 1710 there have been many innovative ideas which have contributed to the success of this invention. Research and technical progress have made possible the development of new materials with new, improved characteristics.

In order that this development may continue forward, I wish you many new interesting insights, a fruitful exchange of experience and exciting discussions in the coming hours and days.