

# Messe News

## Research & Technology

December 2011

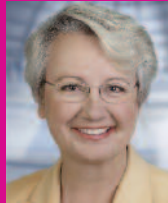
NEW TECHNOLOGY FIRST

23 – 27 April 2012 · Hannover · Germany



Research &  
Technology

HANNOVER  
MESSE



Professor  
Annette Schavan, German  
Federal Minister of  
Education and Research  
and official patron of  
Research & Technology

“The Research & Technology fair at HANNOVER MESSE is an important platform for international knowledge sharing between science and industry. It brings people and innovative ideas together. It is where scientists, developers, engineers and managers go to learn about the latest innovations, make new contacts and form interdisciplinary and cross-sectoral networks.”

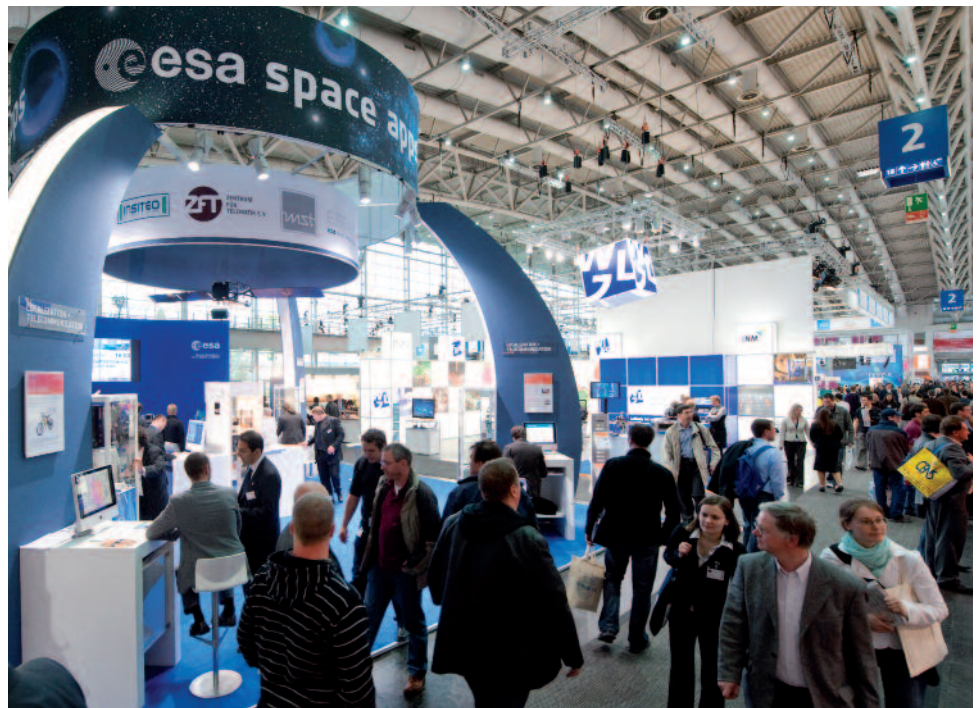
### Benefit from Research & Technology all year round – with Deutsche Messe Interactive

Research & Technology is all about bringing together providers and users of new technologies. And thanks to Deutsche Messe's product database, it can do this not only on the five days of HANNOVER MESSE, but all year round. Our subsidiary company Deutsche Messe Interactive helps this process along by offering marketing services to Research & Technology exhibitors free of charge. These services leverage the power of our Exhibitor Content Management System (ACMS), a database where exhibitors can enter information about their technologies and products as well as details of their display stand and contact persons. Plus, from next year on, exhibitors will have access to a range of new presentation formats, such as video clips, that will enable them to communicate complex technological innovations more clearly. Our Media Service would be happy to help you create and update your ACMS profile.

Contact:  
+49 511 89 35550  
media-service@content.hannovermesse.de

## Where visions become solutions

Research & Technology streamlines the transition  
from research and development to market-ready products



In industry, effective research and development are the lifeblood of innovation and competitiveness. To be effective, research and development must be founded on good science and must yield innovations that can be brought to market quickly and efficiently. These challenges will be examined at Research & Technology, the trade fair that facilitates productive relationships between science and industry. Research & Technology will highlight the vital importance of R&D for intelligent, green solutions – an importance underscored by the “greentelligence” lead theme chosen for the overall HANNOVER MESSE 2012 showcase.

### Key technologies for the 21st Century

Held in Hall 2, Research & Technology will showcase a wide range of new technologies, including innovations from the fields of bionics, adaptronics, textile solutions and nanotechnology. The two-page spread that follows provides an overview of the comprehensive spectrum of themes covered by Research & Technology, each of which comprises myriad exhibits of associated products, technologies and research findings. Thanks to the fair's extensive theme coverage and its location right in the heart of the world's largest industrial technology showcase, it has become the world's premier platform for international

technology and knowledge transfer between science and industry.

### Nanotechnology – tiny innovations with huge potential

Nanotechnology is on the rise and will without doubt have a major impact on our industrial future. It harbors enormous innovative potential that stands to benefit nearly every branch of industry. Research into nature's tiniest structures will continue to open up big opportunities.

### Focus on sustainability

Sustainability is one of the biggest challenges of our time and requires the full commitment of all parts of society. Universities, innovative companies and research institutes, such as the Fraunhofer-Gesellschaft, are working hard on developing new technologies that will open up future-defining applications in key areas, such as energy, mobility and materials and production optimization. Their latest innovations will be on show at Research & Technology 2012.

Further information:  
[hannovermesse.de/en/  
researchandtechnology](http://hannovermesse.de/en/researchandtechnology)

# The whole world of science and research under one roof

Universities, research institutes and innovative companies from around the world under one roof – Research & Technology 2012 is the world’s premier marketplace for applied research. It’s where developers and decision makers from all sectors of industry meet up with leading scientists, where new trends are set and new technology solutions are realized.

## Main display categories at Research & Technology 2012:

- Applied research
- Basic scientific research
- Services for R&D
- Marketing of technologies, research locations and institutions
- Technology and know-how transfer

### WON – World of Nano



“Nanotechnology is a major driver of innovation in almost all sectors of industry. It is a truly multi-disciplinary enterprise, and HANNOVER MESSE, one of the world’s biggest and most important industrial trade fairs, is the perfect platform for showcasing it to a wide international audience. Within HANNOVER MESSE, the Research & Technology show is the ideal setting for presenting fully developed nano products, innovative nanotech applications and exciting new areas of nanotechnology research. For us, the Research & Technology show and its supporting ‘Night of Innovations’ and ‘tech transfer forum’ events are a winning combination because they generate maximum international exposure for nanotechnology.”

Dr. Frank Sicking, Senior Consultant Nanotechnologies, Department “EINS,” (implementation partner for the Federal Ministry of Education and Research/ BMBF), VDI Technologiezentrum GmbH

### Adaptronics



“Adaptronics is a smart-structure technology in which intelligent materials impart sensor and actuator functions to mechanical components. Adaptronic components and systems are able to recognize and adapt to changes in their operating environment and are therefore ideal for noise and vibration-reduction applications, lightweight construction and solutions to improve product service life. Research & Technology is a unique opportunity to present the latest adaptronics research findings and developments to an international audience and to identify current technology trends and promising new applications. For these reasons, it features permanently on our PR calendar. And because of the opportunities it offers for dialogue with existing and potential international customers and cooperation partners from industry and research, it is also a rich source of new projects for us.”

Dr. Michael Matthias, Deputy Head of the Mechatronics/Adaptronics Competence Center at the Fraunhofer Institute for Structural Durability and System Reliability (LBF), Germany.

# Research for sustainability

Fraunhofer institutes as key tech-transfer conduits

Germany’s Fraunhofer institutes provide scientific research services to industry and government.

They are committed to boosting Germany’s international competitiveness by transitioning research findings rapidly into innovative products and solutions. Collectively, the in-

stitutes employ some 18,000 people in Germany and abroad and conduct about 1.66 billion euros-worth of research every year. Roughly two thirds of this volume is done under contract to industrial companies and government-funded research projects.

#### Researchers shaping the future

The Fraunhofer research community is tackling some of the big challenges of our time, such as Germany’s energy system transformation, climate change, resource scarcity, safety and affordable healthcare. The subjects covered by its research include renewable energy from wind,

solar energy and biomass, smart grids and energy storage technology, resource-efficient production, energy-efficient buildings, eMobility and technologies for tomorrow’s cities.

#### Exhibits at five pavilions

Various Fraunhofer institutes will be running exhibits at a total of five pavilions. The main pavilion in Hall 2 will explore fundamental questions, such as “How do we want to live?” “How do we want to work?” and “How can we protect the environment?” Visitors to the main pavilion will also be able to wander through a special building, viewing displays on a range of current research topics along the way. In addition, Fraunhofer researchers will be participating at the Metropolitan Solutions (Hall 26), Adaptronics (Hall 2) and Energy (Hall 13) group pavilions.



## Textile Solutions



"The Textile Solutions pavilion features exhibits on textile architecture, automotive applications, the functionalization of textile materials, and medical technology. I have been pleasantly surprised by the number of contacts we made at the fair that promise new cooperative ventures and synergies. The leads were many and varied. We were looking for new growth areas, and the fair has shown us that there is ample scope for this. Many of our products have potential applications in a very wide range of industries – applications we did not even know about until we exhibited at the fair."

Joan-Dirk Kümpers, CEO, F.A. Kümpers GmbH & Co. KG, Germany.

## Space Apps



"HANNOVER MESSE and its Research & Technology fair provide an excellent platform for communicating information on aerospace industry applications to a wider audience comprising both experts from specialist disciplines and the general public. The sheer breadth of scope of the trade fairs at HANNOVER MESSE does perfect justice to the multinational nature of aerospace industry technology transfer."

Dr. Werner Dupont, Managing Director, MST Aerospace GmbH, Germany

## Bionics



"Bionics is enjoying a major upswing in terms of both research and industrial applications. Bionics is the creative and highly interdisciplinary process of using design ideas gleaned from nature and applying them to modern technology. BIOKON's core business is to facilitate the use of bionics as a source and driver of ideas and innovations in technology, business and society. We are a non-profit research collective of more than 100 universities, research institutes, companies and individuals throughout Germany and Europe who work in the field of bionics. We pool and network the activities and expertise of our members to ensure that biological solutions and optimization strategies are quickly and efficiently turned into innovative products and technologies. Bionic solutions are the result of billions of years of evolutionary research, development and quality assurance. They provide an excellent springboard for diverse and, above all highly innovative, applications, many of which would previously have been technically inconceivable. That's why, for us, HANNOVER MESSE is the ideal presentation platform for our bionic innovations."

Dr. Rainer Erb, Executive Director of the Bionics Competence Network (BIOKON), Berlin

## Night of Innovations



This auspicious, high-profile event is the ideal showcase for exhibitors wanting to forge valuable contacts and put their innovations in front of a high-caliber audience of industry professionals and journalists. In 2012, the German Federal Ministry of Education and Research's environment-themed Year of Science will take center stage and highlight important aspects of HANNOVER MESSE's "greentelligence" lead theme.

## tech transfer – Gateway2Innovation



"Each day, the creative knowledge pool of universities and other research institutes grows larger. The transfer of ideas with wider economic potential from these organizations to private enterprise leads to market-ready innovations. These, in turn, help improve our economic, social and corporate structures. Matchmaking is all about giving companies the opportunity to benefit from the experience of leading innovators in industry. The annual HERMES AWARD helps to raise the profile of those enterprises that have demonstrated an ability to seize the opportunities afforded by knowledge transfer."

Prof. Gerd Wassenberg, Project Director, tech transfer – Gateway2Innovation

### Presentation options:

- Individual exhibition stand
- Participation at themed group displays
- Group pavilions from regions, states and countries

### Sustainability as a core function

Professor Hans-Jörg Bullinger, President of the Fraunhofer-Gesellschaft: "One of our most important functions is to provide a systematic framework for sustainability. As we see it, our research brief is to show the way forward – in partnership with government, industry and society – to a more sustainable future. We urgently need a change in the way we structure our cities – a paradigm shift to an integrated, systems-focused research philosophy that encompasses not just the development of new technologies, but also new stakeholders, new business models and key innovations."



Professor  
Hans-Jörg Bullinger,  
President  
of the Fraunhofer-Gesellschaft

## "Nano in Germany" Initiative

Nanotechnology delivers key solutions in a wide range of application areas, including energy supply, energy-efficient mobility, health, environmental and climate protection and sustainable agriculture. In keeping with the importance of these applications, HANNOVER MESSE 2012 will have an expanded, more prominent nanotech offering that will make it one of the world's most important platforms for nanotechnology research and applications from Germany and around the world. A similar change in focus will be evident at the Schau-Platz NANO partner event at next year's O&S fair in Stuttgart.

### Greater integration of information offering

The World of Nano presentation in Hall 2, which includes displays by the German Ministry of Education and Research and leading nanotechnology companies, has provided strong coverage of the nanotech industry for many years. In 2012, the nanotech exhibits at HANNOVER MESSE will be grouped into a more concentrated showcase titled "Nano in Germany." The integrated focus will give visitors a more efficient overview of Germany's nano-sector capabilities while further raising the profile of the participating exhibitors. VDI Technologiezentrum is the official partner of this initiative.

[worldofnano.net](http://worldofnano.net)  
[schau-platz.de/NanoWorld](http://schau-platz.de/NanoWorld)

# China as Partner Country 2012



The People's Republic of China, the world's second-largest economy, will in 2012 star as Partner Country at HANNOVER MESSE, the world's biggest industrial technology trade fair. The partnership was formalized by the signing of the official Partner Country agreement between the China Council for the Promotion of International Trade (CCPIT) and Deutsche Messe on 14 July 2011. All Partner Country activities at next year's fair will receive the full support of the two countries' governments, a fact emphasized by Dr.

Philipp Rösler, Germany's Federal Minister of Economics and Technology, and Miao Wei, China's Minister of Industry and Information Technology, in a joint statement during the China-Germany intergovernmental consultations in Berlin on 28 June.

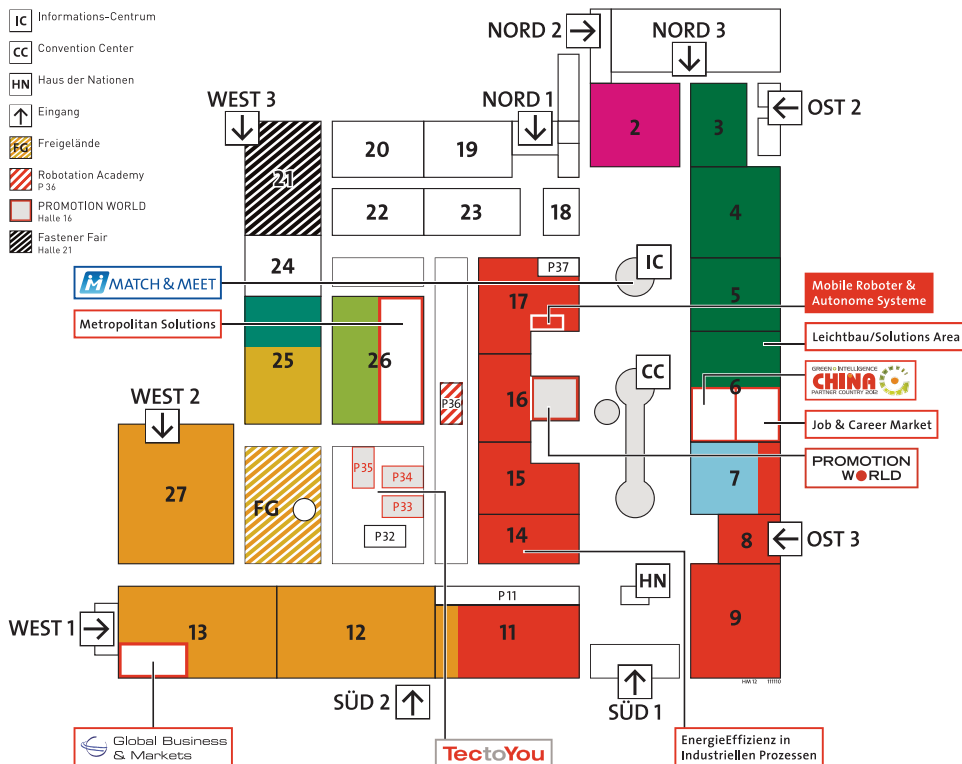
In keeping with the lead theme for HANNOVER MESSE 2012, "greentelligence," China's Partner Country showcase will run under the motto "Green + Intelligence." According to Gu Chao, Director-General of the Exhibition Department of CCPIT, the Chinese companies and research institutions exhibiting at the fair will profile innovative projects from many areas, including sustainable energy production, smart energy grids and green technology.

Dr. Wolfram von Fritsch, Chairman of the Managing Board of Deutsche Messe AG: "We are delighted to have China at our side as Partner Country at HANNOVER MESSE 2012. We are confident that this partnership will be a boon to Sino-German trade relations and will be a major drawcard for exhibitors and trade visitors from around the globe. The partnership gives both exhibitors and visitors a unique opportunity to build their import and export business and to strengthen their commercial and R&D ties with China."



## Map of the exhibition grounds

- Industrial Automation**  
Hallen 7-9, 11, 14-17
- MobiliTec**  
Halle 25, FG
- Industrial Supply**  
Hallen 3-6
- IndustrialGreenTec**  
Halle 26
- Energy**  
Hallen 11-13, 27, FG
- Digital Factory**  
Halle 7
- CoilTechnica**  
Halle 25
- Research & Technology**  
Halle 2



## Ideas and Innovations Manager Day premieres in 2012

In 2012, HANNOVER MESSE will feature the first-ever Ideas and Innovations Manager Day from 10 a.m. to 4 p.m. on 27 April 2012 at Stand D10 in Hall 2. The event will be hosted at the group pavilion of the "tech transfer-Gateway2Innovation" Initiative, a central forum for professional advisory services dedicated to helping innovations reach the market-ready stage. Admission to the event and the whole of HANNOVER MESSE will be free of charge for all registered participants on this day. The event program includes presentations of three case studies and a guided tour of selected exhibition stands. The participants will be able to forge valuable contacts, gather information and learn about best-practice approaches to commercialization in the course of captivating interdisciplinary talks. The Ideas and Innovations Day and the guided tour will cater for a maximum of 50 and 25 persons respectively.

If you are interested, please register with Kim Krieghoff at the Hannover Chamber of Industry and Commerce by 16 April 2012. Tel.: +49 511 3107-260, E-mail: [innovation@hannover.ihk.de](mailto:innovation@hannover.ihk.de)

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