



Federal Ministry
of Education
and Research

Invitation



Joint German-OECD Conference

Benchmarking Industry - Science Relationships



October 16 – 17, 2000
Hotel Maritim pro Arte,
Berlin, Germany

**New: includes the detailed
conference programme**

Benchmarking Industry-Science Relationships

The Government of the Federal Republic of Germany and the Organisation for Economic Co-operation and Development (OECD) are pleased to announce a high-level international conference on

Benchmarking Industry-Science Relationships.

The event will take place in Berlin on October 16 and 17, 2000 in the Hotel Maritim pro Arte, Friedrichstrasse.

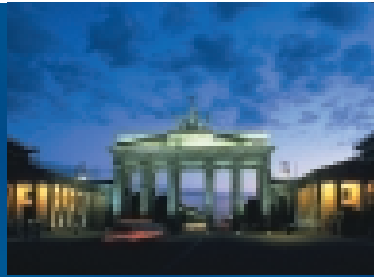
Science-based innovations are a pivotal prerequisite for international competitiveness, wealth and economic growth. Hence, the private and public sectors alike have an incentive in increasing co-operation to further research and commercialise knowledge as quickly as possible. To provide a forum to exchange experiences gained with such efforts and to discuss examples of good practice, the German Federal Government and the OECD will bring together 400 experts from diverse backgrounds from all over the world for this two-day conference.

Speakers, workshop chairs and rapporteurs include more than 60 high-ranking policy makers, scientists and researchers, as well as entrepreneurs and managers from over 40 countries. They will present their experiences with partnerships between research institutions and commercial enterprises, and exchange views on how to benchmark performance in this area, identify good practices, and adapt them to different national circumstances.

Through a series of parallel workshops, discussion at the conference will focus on the following issues:

- How can universities and industry best capture the benefits of partnership while ensuring the broad diffusion of public knowledge?
- What new mechanisms exist for financing research and innovative ventures at the industry-science interface?
- What is the impact of globalisation on the relationship between industry and public research and how can policies be designed to derive national benefits from global partnerships?
- How can science help foster clusters of new industries as well as revitalise mature sectors?
- How can human capital and talent be leveraged to meet the global demand and competition for skills in science and technology?
- What metrics are needed to measure the intensity and impact of industry-science linkages? How can the effectiveness of public and private efforts to foster those linkages be evaluated?

The hosts – the German Federal Ministry of Education and Research and the OECD – and the speakers, chairs and rapporteurs look forward to fruitful and lively discussions with the conference participants.



The conference will be held at the Maritim pro Arte in Berlin, Friedrichstrasse. The splendid boulevard "Unter den Linden" is just a few minutes away.





The Berlin Conference – a synoptic overview

	10:00 -12:30	Opening plenary session	
16 October	14:30 -18:30	Parallel workshops	WS1: Managing and commercialising know-how and core competencies of universities and public research institutions
			WS2: Innovative instruments for joint value creation at the industry-science interface
WS3: Fostering the creation of new industries and economic renewal: regional and sectoral approaches			
WS4: Industry-science relationships in the context of globalisation			
WS5: Meeting the global demand for skills and mobility			
WS6: Evaluating industry-science relationships			
17 October	9:00 -12:30	Workshop summaries by rapporteurs	
		Closing session	
		Concluding remarks	
	13:30 -17:00		

Workshops	<p>Participants will be given the opportunity to gain insights into their special fields of interest. Each workshop will consist of two sessions:</p> <p>The afternoon session of Day 1 will be devoted to an overview of the state-of-the-art in the workshop topics and to presentations on related priority issues. This will provide room for intensive discussions and ensure a fruitful exchange of views among participants.</p> <p>Presentations in the morning session of Day 2 will highlight examples of good practice in key areas, from the viewpoint of practitioners from industry and the public research community as well as of policy makers. Plenary and workshop speakers will include distinguished experts from the public research and academic community, chief executives and senior business officials, and high-level government officials.</p> <p>Among the companies that have been invited to actively participate are: Alcatel, Nokia, SAP, DaimlerChrysler. Major research institutions and universities include Australian Research Council, Max Planck Society, INRIA, National Institute of Health, Stanford University, University of Leiden, University of Tokyo, and University of Toronto.</p>
Participants	<p>The Conference will bring together about 400 representatives from industry, government and the public research sector from over 40 OECD and non-OECD economies.</p> <p>Policy makers and analysts in research and innovation policy, industry leaders and chief technology officers, officials from universities and public research institutions, managers of research funding agencies and foundations, entrepreneurs and small business representatives, venture capitalists, officials from local and regional development agencies, technology transfer and licensing agencies, intellectual property experts, academic and scientific experts are all strongly encouraged to participate in this international conference.</p>
Language	The conference will be held in English.
Parallel Exhibition	Participants wishing to disseminate information on their approaches, policies, programs and achievements will be given the opportunity to present exhibits in a parallel poster session. For further information please contact the conference office.

Morning October 16, 2000

Plenary session

10:00	Opening speech – reshaping the science industry relationship in the days of globalisation	<i>Deputy Secretary General, OECD</i>	Herwig Schlögl
	Creating value for both sides: views on enhancing innovation potential at the industry-science interface. Two complementary views:		
10:20	The view of the scientific partner	<i>President Fraunhofer Society, Germany</i>	Hans-Jürgen Warnecke
10:45	The view of the industrial partner	<i>Executive Vice President Drug Innovation & Approval, Aventis</i> <i>Senior VP and CTO, Agilent Technologies</i>	Frank L. Douglas Thomas Saponas
11:30	German policy: exploiting the potential of public research and industry for the benefit of society	<i>German Federal Minister of Education and Research</i>	Edelgard Bulmahn
12:30	Lunch Speech: Dr. Michael Braun, Vice President Arthur D. Little International Inc., Germany: From Scientific Ivory Tower to Research and Development Enterprise		

Afternoon October 16, 2000

Six parallel workshops

Workshop 1: Managing and commercialising know-how and core competencies of universities and public research institutions

Chair: to be determined

Rapporteur: Phillipe Mustar, Centre for the Study of Innovation, Ecole nationale supérieure des mines de Paris, France

Part 1: The changing roles of universities and public research institutions in the innovation process

14:30	Demonstrating the benefits of industry-science linkages	<i>Chair, Australian Research Council</i>	Vicki Sara
15:10	Balancing excellence in research and education with commercial objectives	<i>Rector, Dresden University of Technology, Germany</i>	Achim Mehlhorn
16:00	Coffee break		
16:30	Safeguarding the freedom of research and the broad diffusion of knowledge	<i>Senior Research Fellow, Stanford Center for Biomedical Ethics, USA</i>	Mildred Cho
17:10	Getting it right: frameworks for encouraging cooperation between science and industry	<i>Deputy Director for Technology, Ministry of Research, France</i>	Jacques Serris

Workshop 2: Innovative instruments for joint value creation at the industry-science interface

Chair: Tom Sommerlatte, Chairman Management Consulting Worldwide, Arthur D. Little International, Germany

Rapporteur: Eyal Press, USA

Part 1: Intellectual property management, marketing and information platforms

14:30	New tools for optimising the transfer, sharing and joint generation of knowledge	<i>Executive Director PREST, University of Manchester, U.K.</i>	Luke Georghiou
15:10	IPR management: Licensing – privatising public knowledge	<i>CEO, Garching Innovation GmbH, Germany</i>	Bernhard Hertel
16:00	Coffee break		
16:30	Marketing the Know-how of universities	<i>Member Executive Board, Association of University Technology Managers, USA</i>	Janet Scholz
17:00	New approaches for SME's: finding the right research institution and cooperating efficiently	<i>Director General, National Technology Agency (TEKES), Finland</i>	Veli-Pekka Saarnivaara
17:30	Conceptual framework for cyclical interaction at the industry-science interface, theoretical foundations and implementation examples	<i>Vice-President Research, Member of the Board, Delft University</i>	A. J. Berkhout

Workshop 3: Fostering the creation of new industries and economic renewal: regional and sectoral approaches

Chair: G. Biorci, Advisor Ministry of Universities, Research, Science and Technology (MURST), Italy*

Rapporteur: Theo Roelandt, Head Research & Development; DG Industry & Services, Dutch Ministry of Economic Affairs, Netherlands

Part 1: Fostering new industries

14:30	Lessons learned from innovation policy approaches at regional levels	<i>Director, Fraunhofer Institute for Systems and Innovation Research (ISI), Germany</i>	Frieder Meyer-Krahmer
15:10	The strategic role of science in building a successful regional cluster	<i>Vice President Research, University of Toronto, Canada</i>	Heather Monreau-Blum
16:00	Coffee break		
16:30	Science-industry relationships in hightech sectors: Lessons from Europe and North America	<i>Director, Center for Research on Innovation & Society, Berlin, Germany and Santa Barbara, USA</i>	Christoph F. Buechtemann
17:10	Government policy for promoting new growth industries	<i>Senior Research Fellows, Science and Technology Policy Institute, Korea</i>	Moon Seob Youn / Yong Soo Kwon

Afternoon October 16, 2000

Workshop 4: Industry-science relationships in the context of globalisation

Chair: Risaburo Nezu, Director, Directorate for Science, Technology and Industry, OECD / Carlo Corsi*, General Director, Roma Ricerche, Italy
 Rapporteur: Alexander Gerybadze, Chair for International Management, University of Hohenheim, Germany

Part 1: Going global – trends in R&D management

14:30	to be determined	Intel	to be determined
15:10	Foreign access to the public research infrastructure while ensuring national benefits	Director, Office for Technology Transfer, National Institutes of Health, USA	Maria Freire
16:00	Coffee break		
16:30	Integration of Eastern European research into global innovation systems	CEO, Icon Genetics, Director International Institute of Cell Biology, Ukraine Academy of Science	Yuri Gleba
17:10	Managing an international knowledge base	Director of Research, Alcatel, France	Alain Bravo

Workshop 5: Meeting the global demand for skills and mobility

Chair: Michael Osborne, Deputy Director, Directorate for Science, Technology and Industry, OECD
 Rapporteur: Philip Shapira, Professor of Public Policy, Georgia Institute of Technology, USA

Part 1: Strategic human capital management for optimising science-industry interactions

14:30	Human capital as an engine for innovation and economic growth	Director Biotechnology Research and Education Program, University of California, USA	Suzanne Huttner
15:10	Joint projects and partnerships for human capital development	Executive Director, British Columbia Advanced Systems Institute, Canada	Brent Sauder
16:00	Coffee break		
16:30	Encouraging mobility between science and industry	Director, Teaching Company Directorate, U.K.	Edwin Robson
17:10	Training partnerships between university and industry	Director, Indian Institute of Technology Madras, India	R. Natarajan

Workshop 6: Evaluating industry-science relationships

Chair: John Barber, Director of Technology, Economics, Statistics and Evaluation, Department of Trade and Industry, U.K.
 Rapporteur: Giorgio Sirilli, Head of Section, National Research Council (CNR), Italy

Part 1: Using performance indicators – Concepts and approaches

14:30	Building innovation indicator frameworks for benchmarking industry-science relationships	Directorate for Science, Technology and Industry, OECD / Observatory for Science and Technology (OST), France	Jean Guinet / Remi Barré
15:10	Concepts for measuring and evaluating knowledge and technology transfer	Universiteit Leiden, Netherlands	Anthony van Raan
16:00	Coffee break		
16:30	Using innovation indicators for assessing the efficiency of science-industry relationships	Research Analyst, CHI Research Inc., USA	Diana Hicks
17:10	Performance-based indicators for government-funded industry-science research partnerships	Joanneum Research Ltd., Austria	Wolfgang Polt
17:50	Measuring and reporting intangible assets in a European contract research organisation	Managing Director, Science and Technology, Austrian Research Center, Seibersdorf, Austria	Günter R. Koch

Evening October 16, 2000

Reception at the Berlin City Hall

19:30 Welcoming speech by Eberhard Diepgen, Governing Mayor of Berlin.

Workshop 1: Managing and commercialising know-how and core competencies of universities and public research institutions

Chair: to be determined

Rapporteur: Phillipe Mustar, Centre for the Study of Innovation, Ecole nationale supérieure des mines de Paris, France

Part 2: Successful national frameworks

9:00	Improving framework conditions for industry-science cooperations – the European perspective	Innovation Policy Unit, Directorate General Enterprise, European Commission / Arthur D. Little International Inc.	Peter Löwe / David Brown
9:50	National frameworks for encouraging cooperation between science and industry: the case of Israel	Science Counsellor Embassy of Israel, U.K., Israel	Baruch Raz
10:30	Coffee break		
11:00	National frameworks for encouraging cooperation between science and industry: the case of Japan	Professor of Science and Technology Policy, University of Tokyo, Japan	Fumio Kodama
11:40	Successful US models of organizing the industry-science interface	Professor of Physics, University of California, Los Angeles (UCLA), USA	C. Kumar N. Patel

Workshop 2: Innovative instruments for joint value creation at the industry-science interface

Chair: Tom Sommerlatte, Chairman Management Consulting Worldwide, Arthur D. Little International, Germany

Rapporteur: Eyal Press, USA

Part 2: Making it happen – financing successful implementation

9:00	New instruments for financing spin-offs and industry-science cooperation	Director, Kreditanstalt für Wiederaufbau, Germany	Michael Bornmann
9:50	Creating a platform for enhanced industry-science relationships	Vice President Technology and Chief Information Officer from the Council for Scientific and Industrial Research (CSIR), University of Pretoria, South Africa	Adrian Paterson
10:30	Coffee break		
11:00	Launching a successful start-up: key success factors and the role of financing	Merlin Biosciences, U.K.	Chris Evans
11:40	Key elements and pitfalls in promoting spin-offs from a public research institution	Vice-President for Technology Transfer, National Institute for Computer Science and Control (INRIA), France	Laurent Kott

Workshop 3: Fostering the creation of new industries and economic renewal: regional and sectoral approaches

Chair: G. Biorci *, Advisor Ministry of Universities, Research, Science and Technology (MURST), Italy

Rapporteur: Theo Roelandt, Head Research & Development; DG Industry & Services, Dutch Ministry of Economic Affairs, Netherlands

Part 2: Creating momentum to rejuvenate maturing sectors

9:00	Revitalising the fish farming sector through science – the case of Norway	Director Marketing and Product Development, Nutreco Aquaculture Research Center, Norway	Viggo Halseth
9:50	Competing successfully in a mature industry	CEO, SNIA-BPD Group, Italy	Umberto Rosa
10:30	Coffee break		
11:00	Bringing new momentum to the automotive industry – the case of Saxony	Manager "Automotive Supplier Network Saxony 2005", Ministry of Employment and Economic Affairs, Saxony, Germany	Volkmar Vogel
11:40	Promotion schemes for co-operation between industry and public research in knowledge based industries for long-term strategic research	Director for Research Coordination and Planning Office, National Institute for Advanced Interdisciplinary Research, Japan	Hiroshi Watanabe

Workshop 4: Industry-science relationships in the context of globalisation

Chair: Risaburo Nezu, Director, Directorate for Science, Technology and Industry, OECD / Carlo Corsi *, General Director, Roma Ricerche, Italy

Rapporteur: Alexander Gerybadze, Chair for International Management, University of Hohenheim, Germany

Part 2: Building and exploiting global networks

9:00	Building technology platforms and global partnerships	ST Microelectronics, France	Jean-Claude Vasuth
9:50	Building and exploiting a global network around a large public research institution	Deputy Director General, Technical Research Centre, Finland	Jarl Forsten
10:30	Coffee break		
11:00	Linking national research centers to international expertise	President, Natural Sciences and Engineering Research Council (NSERC), Canada	Thomas Brzustowski
11:40	How China increases its innovation capacities by accessing the global innovation potential	Ministry of Science and Technology, China	Xielin Liu

Morning October 17, 2000

Workshop 5: Meeting the global demand for skills and mobility

Chair: Michael Osborne, Deputy Director, Directorate for Science, Technology and Industry, OECD

Rapporteur: Philip Shapira, Professor of Public Policy, Georgia Institute of Technology, USA

Part 2: International competition for highly skilled personnel

9:00	Meeting the demand for highly skilled staff: experiences from fast growing industries	Director, NOKIA Research Centre, Finland	Juhani Kuusi
9:50	International mobility – experiences and lessons learned from EU measures	Head of Unit, Directorate General Research, European Commission	George Bingen
10:30	Coffee break		
11:00	Career Patterns of Scientists: Changing needs in coming decades	Director Department Economic Change and Employment, Wissenschaftszentrum Berlin, Germany	David Soskice
11:40	Attracting and retaining research talent	Executive Vice President Development, SAP Labs Inc., USA	Heinz Roggenkemper

Workshop 6: Evaluating industry-science relationships

Chair: John Barber, Director of Technology, Economics, Statistics and Evaluation, Department of Trade and Industry, U.K.

Rapporteur: Giorgio Sirilli, Head of Section, National Research Council (CNR), Italy

Part 2: Approaches that work – successful examples

9:00	DaimlerChrysler's collaboration with science – benefits and risks	Director, Technology Policy, DaimlerChrysler, Germany	Horst Soboll
9:45	The viewpoint of industry: what is the commercial partner looking for and how is success measured?	Executive Vice President, R&D Group Hitachi, Ltd., Japan	Michiharu Nakamura
10:30	Coffee break		
11:00	Building evaluation systems in large public research institutions conducive to industry-science relationships: the meaning of incentive systems for researchers	Vice-Chairman, Executive Board, German Aerospace Center, Germany	Jürgen Blum
11:30	The viewpoint of science: using performance measures to optimise cooperation with industry in a large public research institution	Director, Institut für Semiconductor Physics, Frankfurt (Oder); Germany	Abbas Ourmazd
12:00	The viewpoint of policy analysis: Key elements of successful science-industry relationships	Deputy Director, Fraunhofer Institute for Systems and Innovation Research (ISI), Germany	Hariolf Grupp

Afternoon October 17, 2000

Closing session

13:30	Rapporteurs present summaries of each workshop		
14:30	Panel discussion: Outlook – Shaping the future of industry-science relationships; Chair: Siegmard Mosdorf, German Federal Ministry of Economics and Technology	Deputy Secretary General, OECD	Herwig Schlögl
		Technology Advisor, Matsushita Electric Industrial Co.; Chairman, Business and Industry Advisory Committee to the OECD	Reiji Sano
		Director General, German Federal Ministry of Education and Research	Karsten Brenner
		Secretary General, Volkswagen Foundation, Germany	Wilhelm Krull
		General Director, Ministry for Universities Research, Science and Technology, Italy	Luciano Criscuoli
		President, Technical University Munich, Germany	Wolfgang Herrmann
16:00	Concluding remarks	President, CNRS-Avenir, France	Yves Farge
		Director, Max-Planck Institute for Biochemistry	Axel Ullrich
		Parliamentary Secretary of State, German Federal Ministry of Economics and Technology	Siegmard Mosdorf

Berlin – in the heart of a growing Europe



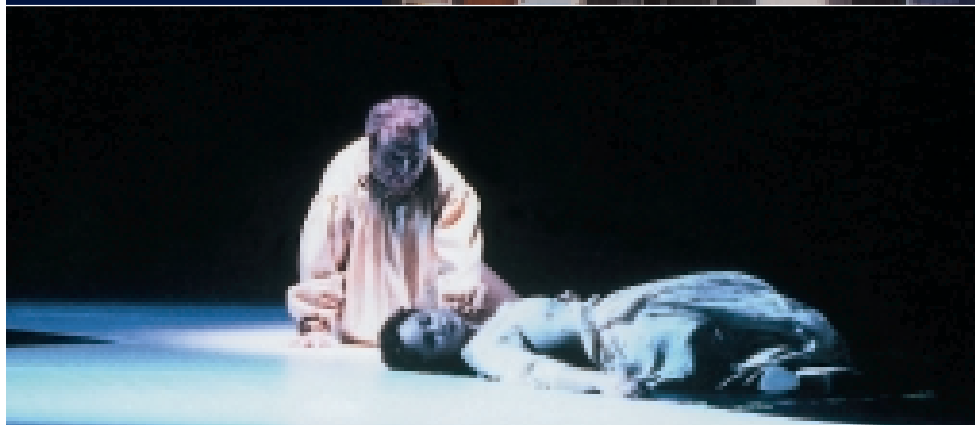
New architecture at the Potsdamer Platz

Berlin is an excellent conference location. Where once a wall divided people from one another lively business and social contacts dominate the heart of the metropolis. Instead of border fortifications, the city's image is now characterised by highrises, unique architecture and an open Brandenburg Gate.



The new Photonic Centre 1 in Berlin-Adlershof

With more than 170 technological research institutions, Berlin offers an exceptionally attractive environment for innovative companies. Sectors such as medical technology, biotechnology, information and communication technology, and transportation technology are expanding rapidly.



Berlin is also a cherished cultural center in Europe. Tickets have been reserved for the conference guests for an evening performance at Komische Oper, one of Berlin's famous opera houses in the evenings of October 14 or 15. Please refer to the enclosed fax form.

Please register by September 15, 2000

Registration and detailed information

For online-registration and more information please refer to our conference homepage, alternatively you may register by filling in the enclosed form.

www.industry-science-berlin2000.de

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