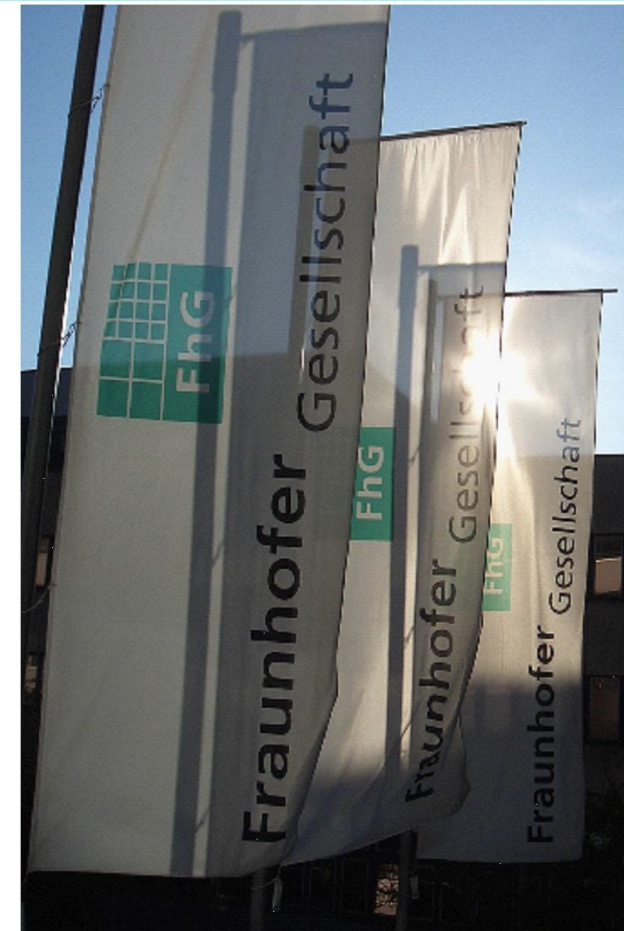
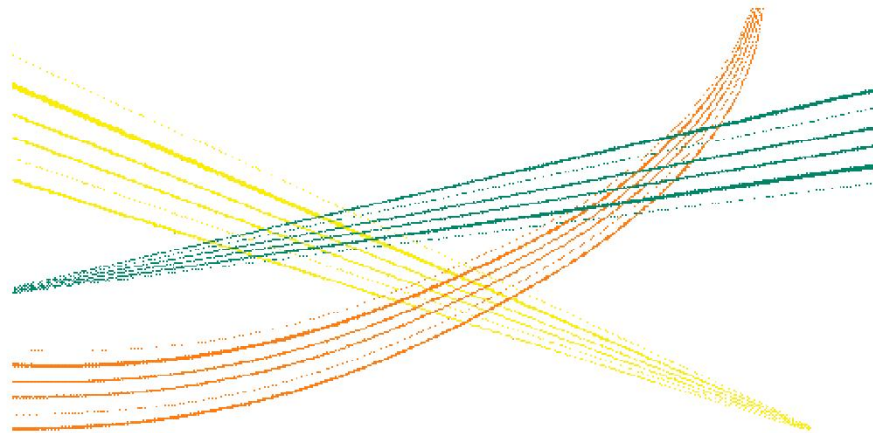
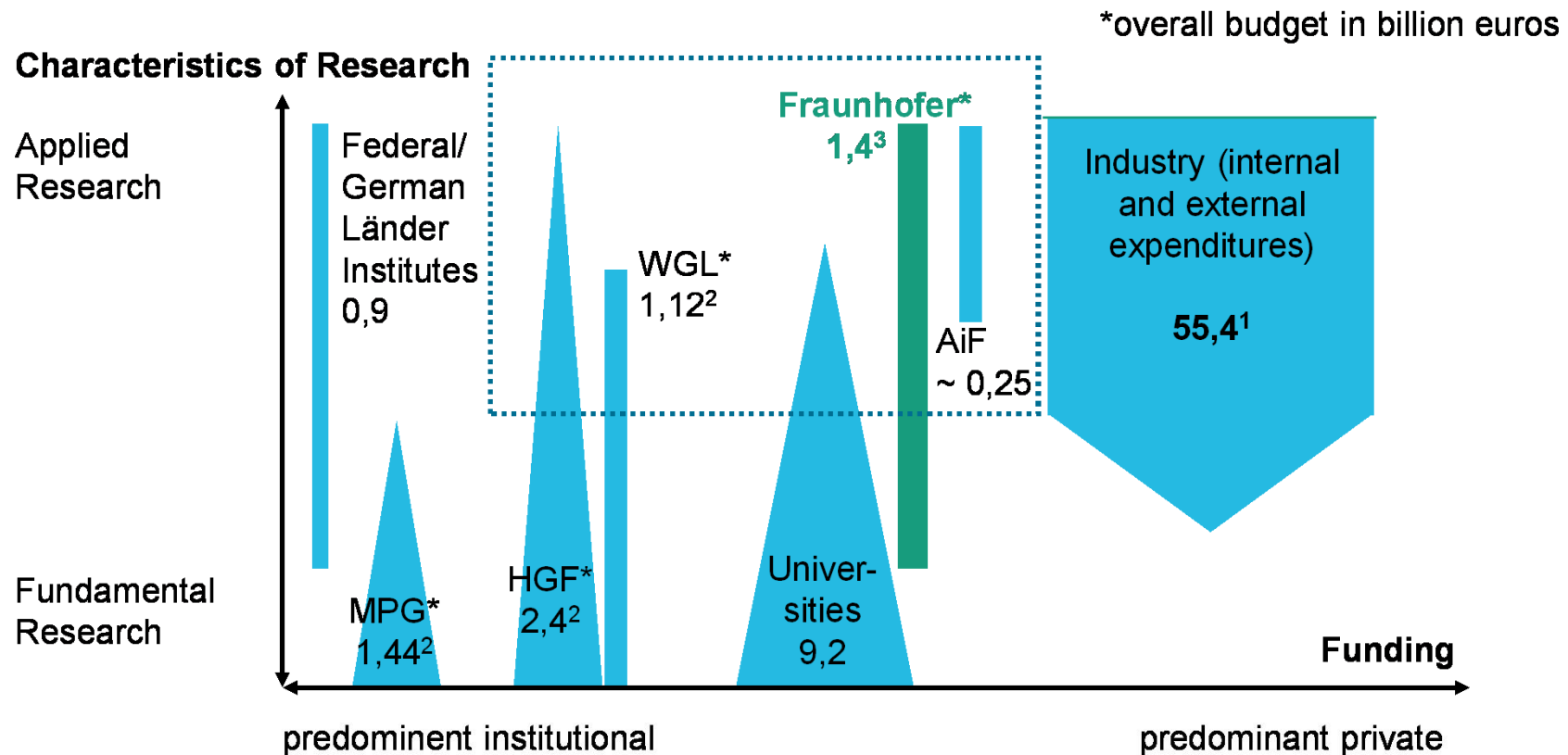

The Fraunhofer-Gesellschaft

Applied Research for Tomorrow's Global Challenges

M-A. Courage and J. Schreiber
München and Dresden



The German Research Landscape



HGF Hermann von Helmholtz-Gemeinschaft
WGL Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz
AiF Arbeitsgemeinschaft industrieller Forschungsvereinigungen
MPG Max-Planck-Gesellschaft

¹ estimation Wissenschaftsstatistik 2008, Stifterverband

² 2007

³ 2008

Source: Stifterverband für die Deutsche Wissenschaft, Destatis

The Fraunhofer-Gesellschaft



The Fraunhofer-Gesellschaft undertakes applied research of direct utility to private and public enterprise and of wide benefit to society.

Our Customers:

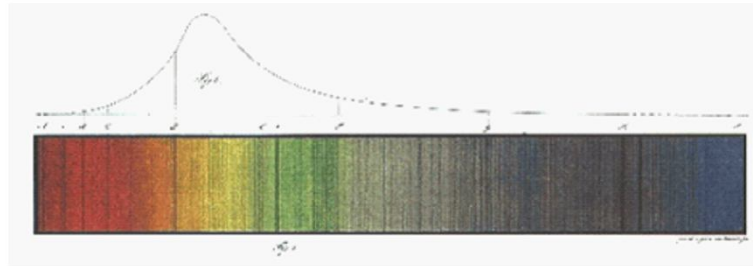
- Industry
- Service sector
- Public administration

Joseph von Fraunhofer (1787-1826)



Scientist

Discovery of the »Fraunhofer-Lines« in the solar spectrum



Inventor

New machining processes for lenses

Businessman

Director and joint partner of a glass factory





**Joseph von
Fraunhofer**



**The Fraunhofer-
Gesellschaft**

Discovery of
“Fraunhofer Lines” in
the sun spectrum

New methods of lens
processing

Head of
Royal Glass Factory

Researcher

Inventor

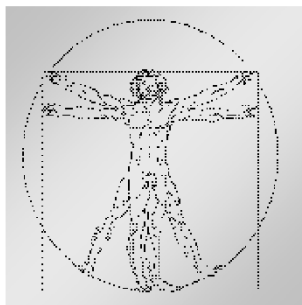
Entrepreneur

e.g.: Innovation
Award 2004 of the
German Federal
President for Electric
Biochip Technology

e.g.: 2 patent
applications each
working day

e.g.: ~ €450 million
revenues from
industry (about 4000
contracts) p. a.

Demands on a Fraunhofer Institute



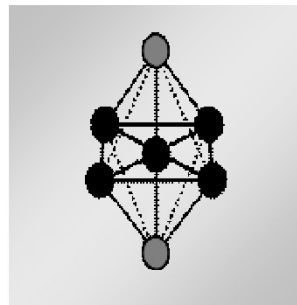
Scientific competence
proved by the
recognition of the
scientific community



Well-balanced financial mix
of different
independent sources



Market success and entrepreneurial competence
proved by contracts
with industry and
government

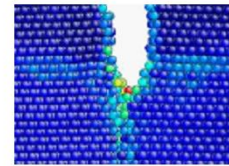
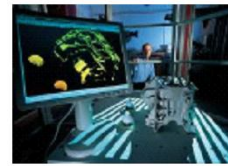
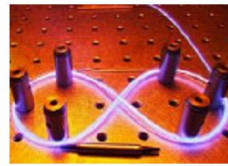
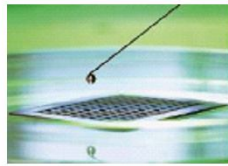


Professional networking
with other Fraunhofer
Institutes and externals

ZV-A2/ March 05

The Fraunhofer-Gesellschaft:

Profile



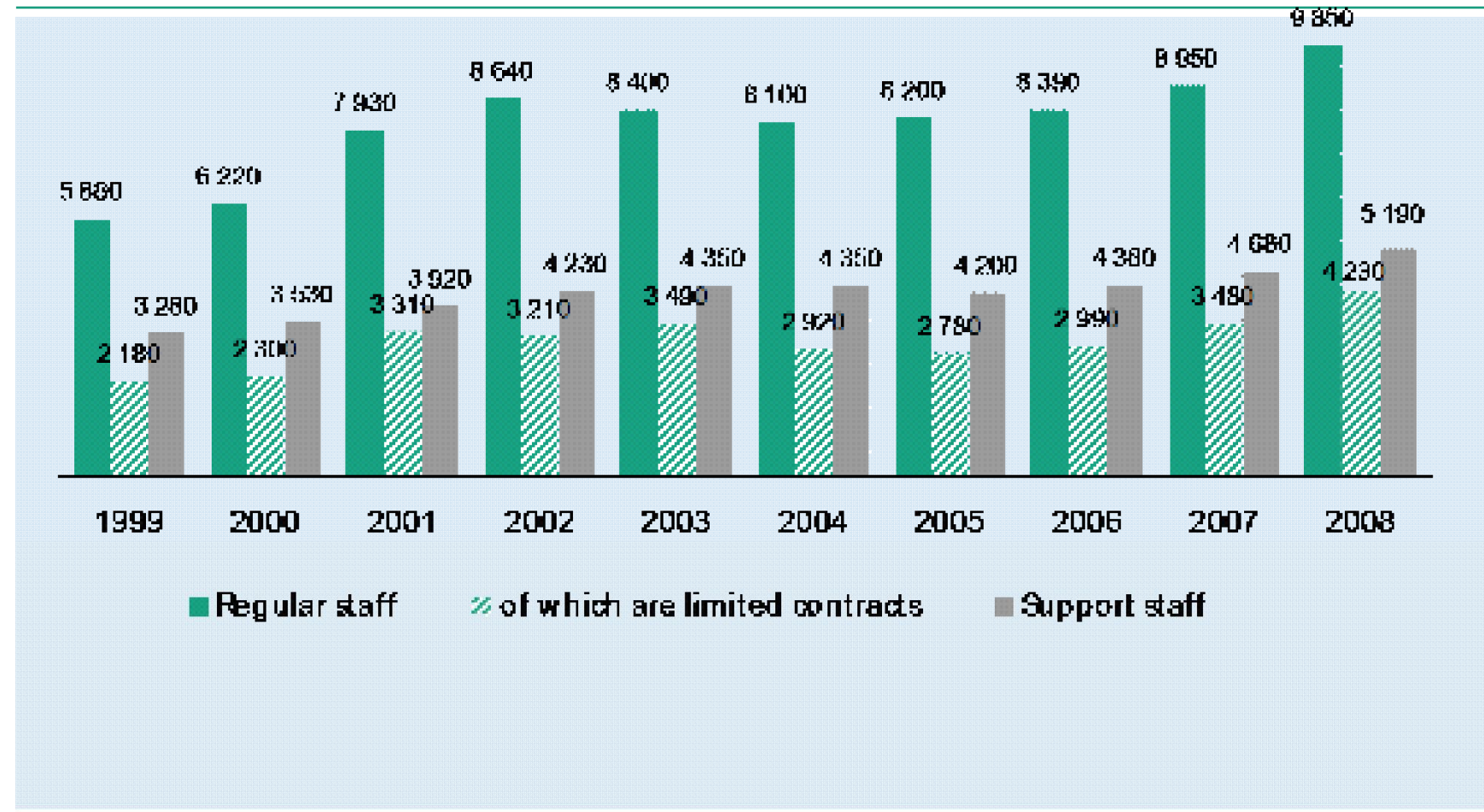
- 60 Institutes
- 17.000 employees
- Customers: Industry and Services
- 1,4 billion Euros research volume per annum, including more than 1 billion Euros in contract research
- Information and Communication Technology
- Life Sciences
- Microelectronics
- Surface Engineering and Photonics
- Production
- Materials, Components
- Defense and Security Research

Financial Structure

in million euro	2004	2005	2006	2007	2008	2009
Contract Research	919	1 068	1 032	1 164	1 291	1 354
Defence Research	41	42	39	39	38	94
Expansion Investments	109	143	115	117	72	179
Total	1 069	1 253	1 186	1 320	1 401	1 627

Fraunhofer-Gesellschaft Human Resources

1999 - 2008



The Fraunhofer-Gesellschaft in Germany

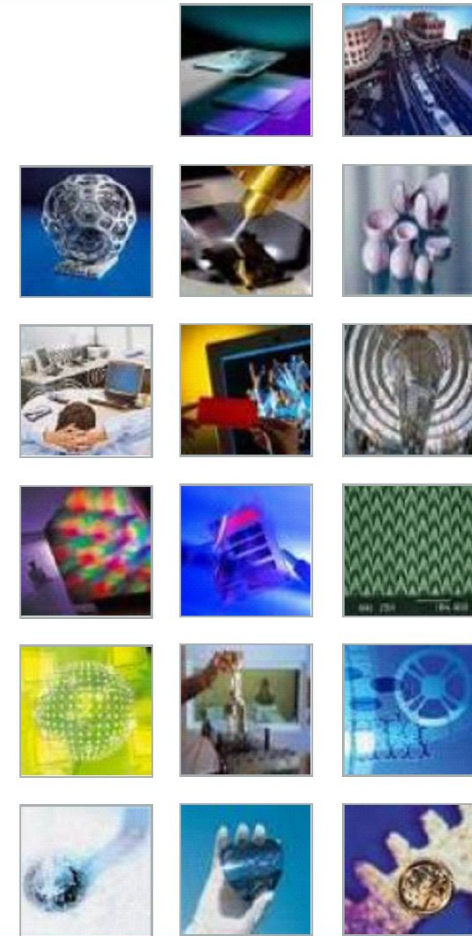
at 40 locations



12 Fraunhofer institutes in Dresden

Fraunhofer Alliances

- Adaptronics
- Advancer
- Ambient Assisted Living
- Building Innovation
- Digital Cinema
- eGovernment
- Energy
- Food Chain Management
- Grid Computing
- Nanotechnology
- Optic Surfaces
- Photokatalysis
- Polymer Surfaces
- Rapid Prototyping
- Cleaning Technology
- Simulation
- Water Systems (SysWasser)
- Traffic and Transportation
- Vision



Frontline themes **Tomorrow's opportunities**

People need

- an affordable healthcare system
- security
- energy
- communications
- mobility
- and a clean environment.

The Fraunhofer-Gesellschaft has identified strategic research areas in which it is seeking answers to these challenges of the future. The Fraunhofer-Gesellschaft is pointing out particularly effective courses of action. Its objective is to employ new technologies to devise solutions that will make our life healthier, safer and simpler, and will be kinder to the environment.

The Fraunhofer-Gesellschaft

Research Units Worldwide



Examples for Fraunhofer Activities in Europe

Fraunhofer-Chalmers
Research Centre for Industrial
Mathematics (FCC), Gothenburg

Fraunhofer-Gesellschaft
Bureau Brussels

Fraunhofer-Cooperation
with "Association des Instituts
Carnot"

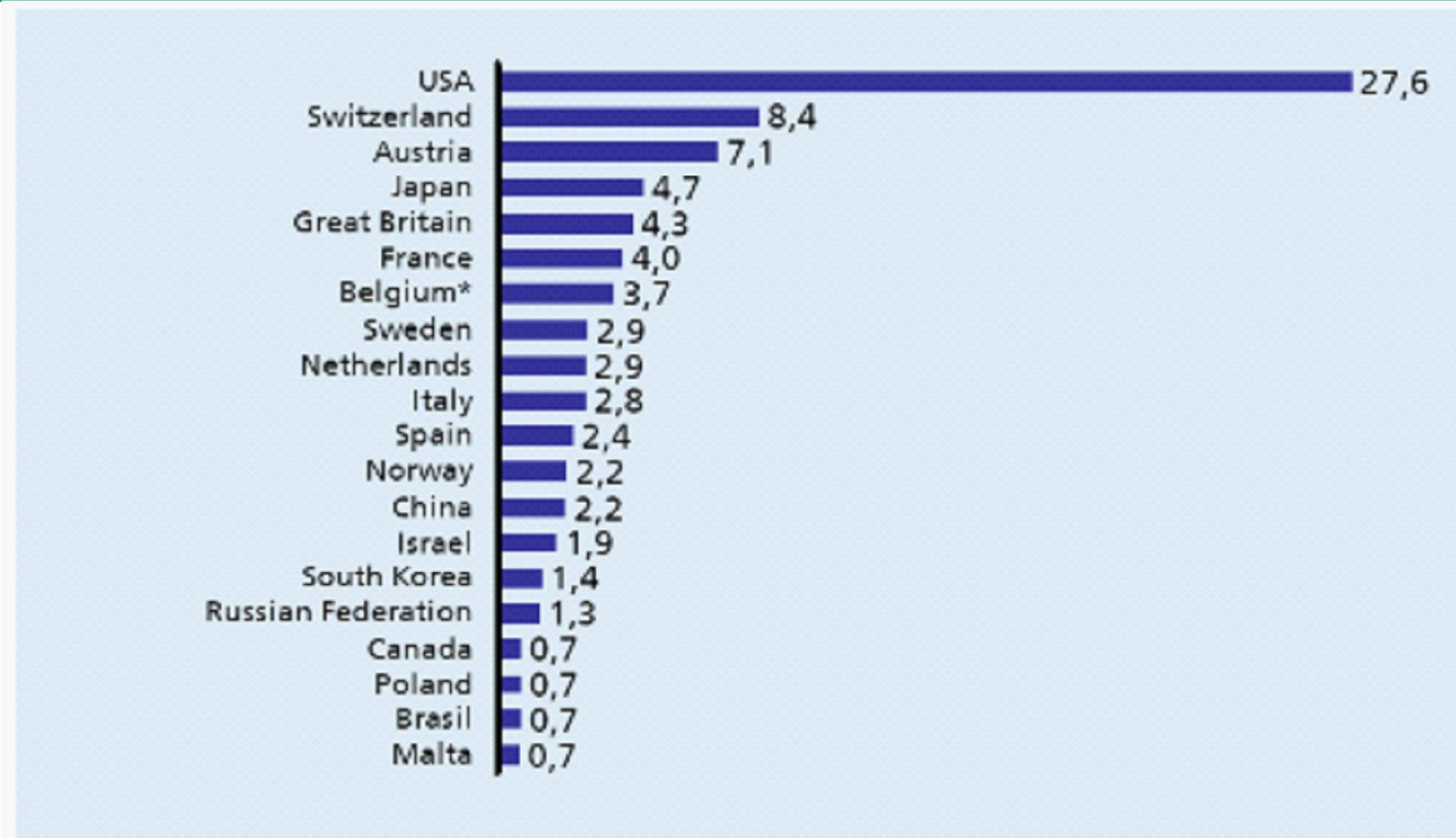
Fraunhofer Portugal
Research
Associação



Fraunhofer Project Center
for Laser Integrated
Manufacturing in cooperation
with Politechnika
Wrocławska

Fraunhofer Austria Research
GmbH

International Revenues 2009 by Countries Top 20 (without EU-Commission) in million €



Fraunhofer Academy



- **Provides excellent professional training for business leaders and experts of our customers**

- Is based on the advanced applied research know-how of our Fraunhofer Research Institutes
- Is a contribution of Fraunhofer to the federal Initiative for Research and Innovation since 2006



The top employers chosen by German students

Universum Student Survey 2009

Natural Scientists	IT Specialists	Engineers
1. Max-Planck-Gesellschaft	1. Google	1. Audi
2. Fraunhofer-Gesellschaft	2. IBM	2. Porsche
3. Bayer	3. SAP	3. BMW
4. BASF	4. Fraunhofer-Gesellschaft	4. Siemens
5. Roche	5. Microsoft	5. Daimler
6. DLR	6. Apple	6. EADS
7. Novartis	7. Porsche	7. Fraunhofer-Gesellschaft
8. Merck	8. Siemens	8. Robert Bosch
9. Bayer Schering Pharma	9. Audi	9. Lufthansa Technik
10. BMW	10. Max-Planck-Gesellschaft	10. Volkswagen
11. Siemens	11. BMW	11. DLR
12. Boehringer Ingelheim	12. Intel	12. ThyssenKrupp

Quelle: Universum Communications, Stand Mai 2009

Fraunhofer Activities in Belarus

- Cooperation Agreement between the National Academy of Sciences (NAS) of Belarus and the Fraunhofer Society of Germany
Dated July 20, 2003
- Founding of the International Science Laboratory of Laser-Optical Diagnostics (ISL-LOD) at the Stepanov-Institute of Physics in Minsk
a joint center of excellence together with the Institute for Nondestructive Testing
Juni 2004
- Agreement for the creation & support of an International Science Laboratory Between ISTC & the Institute of Physics NASB with FhG Institute for Non-Destructive Testing
Signed on September 30, 2005
- ISL-LOD is working successfully until now!



President NAWRB, Acad. M. Myasnikovich,
Prof. M. Kröning und ISTC Director N.