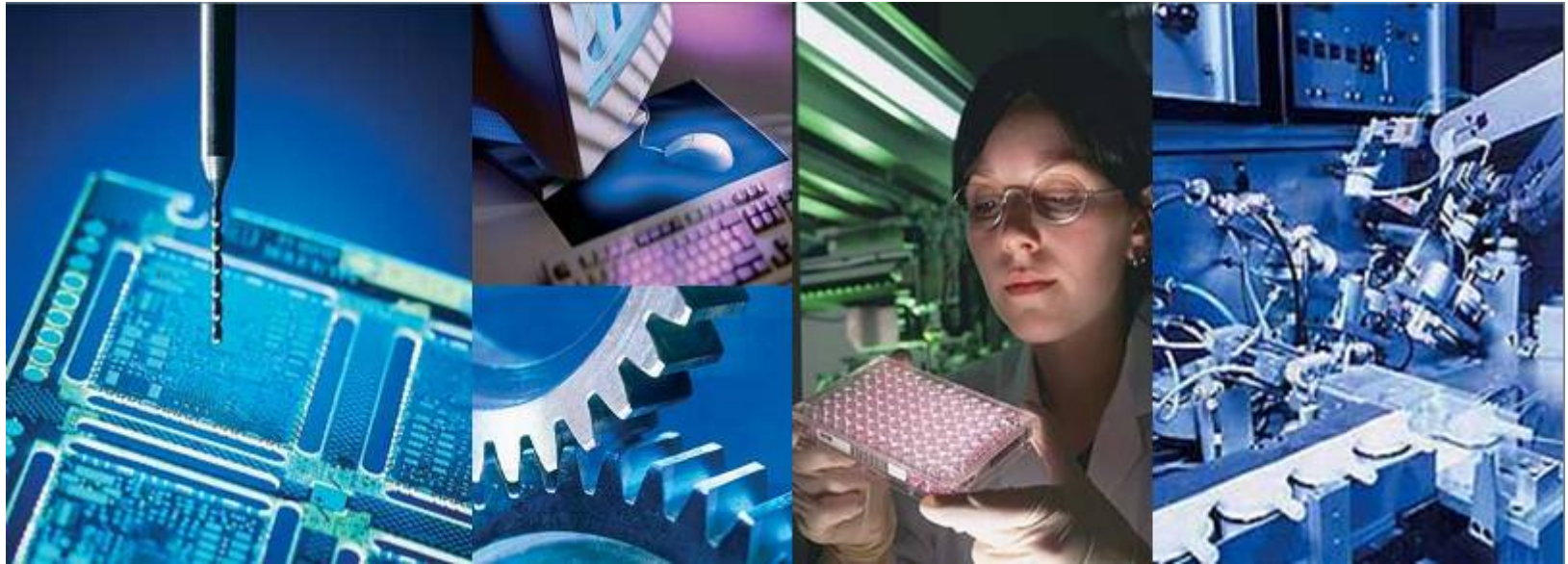

Fraunhofer-Gesellschaft

Partnerships for Innovation



Joseph von Fraunhofer (1787 - 1826)

The Fraunhofer- Gesellschaft (today)

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.: ~ €350 million revenues
from industry (about 4000
contracts) p. a.

Fraunhofer Profile in 2007

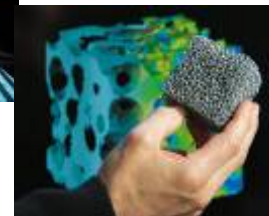
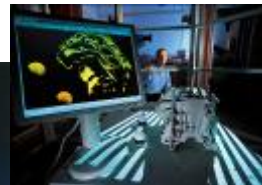
56 Institutes

12 770 employees

about €1,2 billion
research budget

7 Alliances

- Information and Communication Technology
- Life Sciences
- Materials and Components
- Microelectronics
- Production
- Surface Technology and Photonics
- *Defense and Security*



ZV-P2/Jan 07



Fraunhofer Gesellschaft

The Fraunhofer-Gesellschaft in Germany

56 Institutes at 40 locations

- Institutes
- Branches of Institutes, Research Institutions, Working Groups, Branch Labs and Application Centers



Fraunhofer ITEM Hannover/Germany



Fraunhofer Institut
Toxikologie und
Experimentelle Medizin

Fraunhofer ITEM

Institute of Toxicology and Experimental Medicine



Staff (2007)

73 scientists
25 graduates
78 technical staff
29 laboratory assistants

Total Budget

17.1 million euro
55% industry
16% public projects
29% basic funding



Business Areas of the Fraunhofer ITEM

- Drug Research, Medical Biotechnology and Molecular Medicine
- Clinical Allergy, Asthma and Inhalation Research
- Occupational, Environmental Toxicology and Consumer Protection
- Testing and Registration of Chemicals, Biocides and Pesticides



The Division Chemical Risk Assessment



Fraunhofer Institut
Toxikologie und
Experimentelle Medizin

Division Chemical Risk Assessment

Head: Dr. Inge Mangelsdorf

- long-term experience in risk assessment (>15 a)
- at national and international level
- multidisciplinary team (with background in toxicology, ecotoxicology, chemistry, veterinary medicine)
- experimental experts in toxicology onsite



Membership in several advisory and working committees

- SCHER (Scientific Committee on Human and Environmental Risks)
- EFSA Scientific Committee (BMD working group)
- Indoor Air Commission of the Federal Agency of the Environment (UBA)
- Governmental Commission of Lower Saxony investigating the impact of REACH
- Working committee „Chemical Risk Assessment“ of the German Chemical Society
- Working committee „Regulatory Toxicology“ of the German Society of Toxicology



Improvement of risk assessment procedures based on (Q)SAR/databases

REPDOSE: database aimed at correlating organ-specific effects after repeated dose- application with the structural and physicochemical properties (funded by CEFIC-LRI).



OSIRIS: development of **integrated testing strategies (ITS)** fit for REACH. Development of the database **Breath** on occupational exposure limits correlated to inhalation toxicity (funded by (EU-FP-6).



Endocrine Disruptors: Development of structure- and risk-based methods to identify endocrine disrupting chemicals under REACH. Initiation of the database **FeDTE_x** on reprotoxicity (funded by LRI Cefic).

Umwelt
Bundes
Amt 
Für Mensch und Umwelt



Threshold of toxicological concern (TTC): Evaluation of the current TTC concept developed by Munroe with the database on repeated dose-toxicity RepDose (funded by ECETOC, LRI)

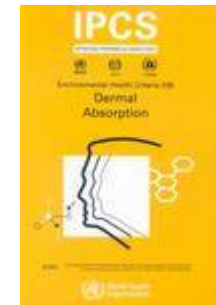


ecetoc



Risk Assessment – Activities

Environmental Health Criteria Document on Transgenic Animal Mutagenicity Assays (EHC 233, for WHO) and on Dermal Absorption (EHC 235, for WHO)



„Workplace exposure from the use of biocidal products – Part 1: Inhalation and dermal exposure data for the spray application of liquid biocidal products“ (funded by German Federal Institute for Occupational Safety and Health BAUA)

baua:
Bundesanstalt für Arbeitsschutz
und Arbeitsmedizin



"Environmental Health Criteria Documents" (EHC) and "Concise International Chemical Assessment Documents" (CICAD)



Reports for German Existing Chemicals Program (BUA)



EU Risk Assessment Reports for Sodium Perborate, o-Anisidine



Risk assessment for human health and environment within the scope of HERA (Human and Environmental Risk assessment on Ingredients of Household Cleaning Products)



IUCLID data sets and SIDS dossiers for the ICCA HPV-Initiative to be submitted to the OECD (esp. categories).



More than 300 IUCLID data sets for several clients



