WHAT IS NANOTECHNOLOGY?

Nanotechnology is considered one of the key technologies of the 21st century. It uses methods and effects that allow for the analysis, controlled modification, or the manufacture of objects and structures in the range of a few nanometres.
A nanometre is one billionth of a metre or one millionth of a millimetre and, hence, corresponds roughly to one fifty thousandth of the thickness of a human hair.

The success of this fascinating technology is particularly based on its versatility. It will bring about fundamental changes of basic research as well as many sectors of industry and of life from electronics to the health care system. On the nano level, physical or chemical properties like electrical conductivity, colour, melting point, and reactivity of materials may change dramatically.

These modified properties open up new technological opportunities, ranging from the conversion and storage of energy, to the lifespan of tyres, to surface protection and cosmetics, to the diagnosis and the fighting of diseases. Consequently, nanotechnology as a multidisciplinary technology influences numerous new developments.

DaNa - CITIZENS' CONFERENCE

A citizens' conference on "Nanotechnology and environmental protection – chances and risks" will take place in Berlin within the framework of the DaNa project.

It will provide citizens with the opportunity to form their own knowledge-based opinion on chances and risks associated with nanotechnological processes in the environmental sector.

For further information please contact our project team:
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CONTACT

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KIT Karlsruhe Institute of Technology

EMPA Materials Science & Technology

HELMHOLTZ CENTRE FOR ENVIRONMENTAL RESEARCH – UFZ

Fraunhofer IKTS

UfU Independent Institute for Environmental Concerns

picture credits: Macromolecular Chemistry / Philipps-Universität Marburg

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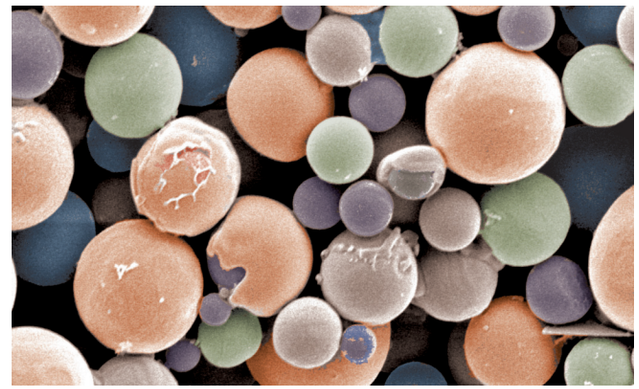
DaNa

Acquisition, evaluation and public-oriented presentation of society-relevant data and findings relating to nanomaterials
www.nanoobjects.info

Knowledge Base Nanomaterials



Latest research results on the effects of nanomaterials on humans and the environment

Scientifically profound
and
easy to understand

FUNDED BY THE
Federal Ministry of Education and Research
within the framework of the WING programme

www.nanoobjects.info

THE PROJECT

What exactly are nanoparticles? What is meant by “exposure”? When do toxicologists speak of a risk? This and many more questions are answered by the new internet knowledge base **www.nanoobjects.info**.

DaNa
www.nanoobjects.info

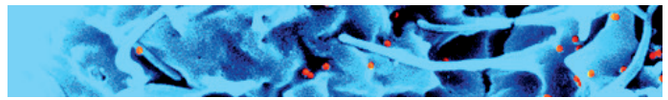
Many consumers miss reliable and understandable information on nanomaterials and nanotechnology. In an interdisciplinary approach of human toxicology, environmental toxicology, biology, physics, chemistry, and sociology the DaNa project team wishes to provide for more transparency and to process results of research on nanomaterials and their influence on humans and the environment in an understandable way.
For this purpose, we process results of completed and current projects, funded by the German Federal Ministry of Education and Research, analyse scientific publications, reports, and latest news on human and environmental toxicology, and wrap up the state of knowledge in the knowledge base.

Screenshot from www.nanoobjects.info

THE KNOWLEDGE BASE

Here you find:

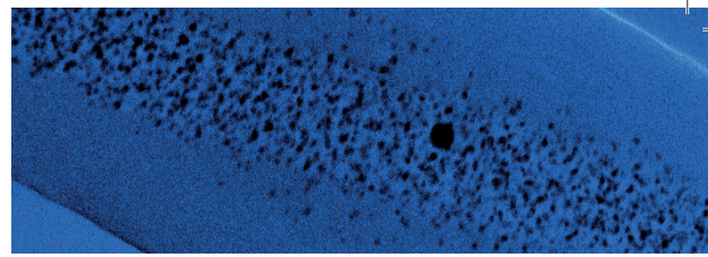
- Detailed **explanations of important health and environmental aspects** of nanomaterials
- **Relevant nanomaterials** that are **already being used**
- **Summaries and evaluation of safety studies** of the respective materials (release, uptake, and behaviour of the materials)
- Facts relating to **risk management**



SIMPLE NAVIGATION, UNDERSTANDABLE TEXTS

- Thanks to the **linking** of **material** and **application,** you will find your information quickly
- The **texts** are edited such that they are **understandable** by **interested laymen**
- **Journalists, NGOs, politicians or scientists** will find links to further literature
- We show **applications and products** which may contain nanomaterials and guide you directly to the relevant materials
- The **glossary** contains **valuable further information** about technical terms and testing procedures

Open questions? dialogue@nanoobjects.info



LATEST INFORMATION ABOUT NANO-SAFETY RESEARCH

Find information on running and completed projects, funded by the German Federal Ministry of Education and Research, on **nano-safety** for **humans and the environment:**

- Project description and project goals
- Duration
- Project partners
- Results achieved

CONTINUOUS UPDATES

- Regular **extension** of the **knowledge base** with data of other nanomaterials
- **Press reports** and **news** on **nanomaterials**
- Additional data from scientific **publications**

www.nanoobjects.info

The latest knowledge base on the topic of nanomaterials – scientifically profound and easy to understand